FINANCIAL SERVICES REVIEW, 6(2): 141–150
ISSN: 1057-0810

Conversions of Mutual Savings Institutions: Do Initial Returns From These IPOS Provide Investors With Windfall Profits?

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We examine initial returns of fully underwritten IPOs of converting thrifts for evidence that managers and depositors of conversion-related offers earn significantly greater returns than investors in IPOs of other financial institutions. Regulators have suggested that new guidelines for conversion from a mutual to a stock thrift are designed to curb "windfall profits" earned by insiders investing in conversion-related IPOs. While there are reports of average initial returns of more than 20% for conversion-related IPOs, our results suggest that investors earn average initial returns of about 7%, which is not significantly different than returns from IPOs of other thrifts and commercial banks.

I. INTRODUCTION

Conversions of mutual savings and loans to stock organizations are accompanied by initial public offers (IPOs) of stock which infuse the institutions with equity capital. Average initial returns of 24% for 1992 and 29% for 1993 have been reported for conversion-related IPOs (Barth, Brumbaugh, & Kleidon, 1994), which is several times the average initial return of 7% for conversions during the mid-1980s (Alli, Yau, & Yung, 1994). The Office of Thrift Supervision (OTS) and the Federal Deposit Insurance Corporation (FDIC) adopted new guidelines for conversions, effective January 1, 1995, intended to reduce the ability of bank executives to earn excessive profits from the conversion process. In particular, regulators suggest that insider's set the offer price of the IPO too low or take a disproportionate number of shares. The new rules include a requirement that long-term depositors be given first chance to buy the stock of a converting institution and ban the use of "running proxies," which are obtained from depositors when accounts are opened and

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used by managers without authorization. Stock option plans or other nonqualified stock benefit plans are also prohibited from being implemented within one year of conversion, unless the plan is fully disclosed in the offering materials.

The ability to capture abnormal returns in conversion-related initial offers is of particular significance to individual investors because it contrasts sharply with their experience in the typical IPO market. Individual investors are usually at a big disadvantage in the IPO market because lucrative offers are preserved for institutional investors, with individual investors receiving a disproportionate share of losing offers (Ibbotson, Sindelar, & Ritter, 1994). Conversion-related IPOs give priority to depositors in the mutual thrift, so individual investors, as depositors, cannot be closed-out of the offer in favor of institutional investors.

This study examines the following hypotheses:

H_O: IPOs of converting institutions are not priced significantly different from IPOs of other financial institutions.

H_A: IPOs of converting institutions are significantly more underpriced than IPOs of other financial institutions.

The results of the analysis will also provide important information to depositors and regulators. If depositors have the ability to earn abnormal returns by investing in conversion-related IPOs, it might affect their willingness to approve the conversion plan, as well their decision to invest in the subsequent IPO. The evidence will also provide information for regulators regarding the pricing of the conversion-related IPO as a means of wealth transfer to insiders.

The following section contains a discussion of the agency issues associated with converting mutual organizations to stock organizations and a summary of empirical studies related to conversions. The data and methodology used to analyze IPO underpricing is presented, followed by the results of the study. Finally, a summary of the study and implications for conversion investors are discussed.

II. OVERVIEW OF CONVERSION STUDIES

The increased regulatory scrutiny associated with conversion reflects the uncertainty associated with effective control of mutual organizations. First, mutual organizations are insulated from the market for corporate control because there is no marketable ownership claim. Also, unlike publicly-owned institutions, outside board members are generally chosen by internal managers. As a result, boards of directors may play less of a monitoring role in mutual organizations than they do in public corporations. Finally, owners of mutual organizations (the depositors) regularly give insiders perpetual proxies that have limited disclosure requirements. For these reasons, management may have effective control of the mutual organization (Kreider, 1972). As a result, managers of mutual organizations may be more effective at, and/or more likely to, expropriate wealth from other claims holders by underpricing conversions. However, conversion to a stock thrift will also subject the managers of such firms to the market for corporate control at some point in the future, although regulatory restrictions offer protection from hostile takeovers for 3 to 5 years post-conversion (Cordell, MacDonald, & Wohar, 1993). If conversions are motivated by expropria-

tion, management must believe that the wealth transferred by conversion to a stock company is greater than that would accrue in the future if the firm operated as a mutual organization and management maintained effective control.

In addition to temporary insulation from the market for corporate control, conversion-related IPOs differ in several other ways from typical IPOs. The underpricing of an IPO associated with a conversion can take place in the absence of asymmetric information, that is, even if outsiders have full information about the risks of the issuing bank. This underpricing can occur because the thrift's initial shareholders receive pro-rata claims to the proceeds of the sale of stock since no founding owners exist to claim a portion of the net proceeds or the initial net worth as in a typical IPO (Masulis, 1987). As a result, some underpricing is predicted as long as the thrift has positive pre-conversion value, and the proceeds are not expected to be invested in unprofitable ventures.

Conversion-related IPOs are also less likely to experience potential conflicts of interest between insiders and outside investors because insiders and outsiders will buy shares at the same price, though insiders must hold shares for one year after conversion (Maksimovic & Unal, 1993). Depositors may subscribe to a maximum of 5% of the issue, whereas collective management holdings have a maximum of 15%-25% of the issue (Aharony, Falk, & Linn, 1996). Aharony, et al. report average subscription rates of 39% for regular depositors and 5% for management, while Dunham (1985) suggests managers and directors purchase an average of 20% of all conversion shares.

Empirical research has addressed possible motivations for conversion of savings and loans, including expropriation as asserted by regulators. Masulis (1987) provides evidence that conversions from the period 1976-1983 were motivated by efficiency rather than expropriation. The results suggest an increase in both management turnover and access to capital. The conversion-related IPOs were found to generate average initial returns of 5.61%. Similar studies of conversions in the 1980s do not find evidence consistent with efficiency gains, nor are the results suggestive of expropriation. Simons (1992) compares 55 converted New England savings banks to mutual savings banks over the period 1983-1990, and her results suggest that converted institutions have a greater propensity to assume risk, while no increase in profitability is found. Cordell, et al. (1993) find similar trends.

Simon's analysis of insider ownership indicates management and directors are more likely to increase their stake in thrifts as the risk of the assets increase. However, the motivation for management to increase risk while reducing job stability is not addressed. While managers may benefit from increased returns associated with increased risk through stock ownership, they simultaneously put their human capital at risk.

Regulator and media reports on conversions suggest that the change to a stock organization may provide excessive compensation to managers and trustees through IPO subscription or stock compensation. While the range for the value of the offering is determined by independent appraisal, the stock is generally offered within a range of 15% above or below appraised value as decided by management and approved by regulators (Simons, 1992). Because the conversion price tends to be below market value, managers and trustees as subscribers to the IPO have an opportunity to profit from the conversion. This suggests that the greater the difference between the conversion price and perceived market value, the more likely management is to seek conversion. If conversion reflects an attempt by management to expropriate wealth by using their ability to manipulate the offer price, all

else equal, underpricing of converting institutions' IPOs will be greater than underpricing of IPOs for other savings institutions.

Maksimovic and Unal (1993) study the post-offer price performance of 287 thrifts converting during 1980-1988. On average, the converted thrift's IPOs are offered at 5% below their initial market value. The choice of offer size by converting institutions was examined to determine the extent to which management and outsider interests are aligned. Management can choose between minimizing issue value, thereby lowering their purchase price for a set number of shares, or maximizing issue value, thereby raising the amount of capital and financial slack available to consume perquisites. The results indicate manager and investor interests are aligned regarding the choice of issue size; that is, issue size and underpricing are positively related.

The influence of the participation of depositors and management in the offering is examined by Aharony, et al. (1996). In a study of 100 conversions between January 1984 and June 1987, they find that following the conversion the value of the converted institution is positively related to depositors' subscriptions. For small levels of managerial subscription, they find a negative relationship between managerial ownership and the value of the converted institution, but this relationship turns less negative as managerial subscription increases. The average level of underpricing for firms in the sample was 6.5%. They also report that the majority of offerings are generally purchased by outside investors, rather than by depositors or employees of the converting institutions.

These studies of IPOs of converting institutions provide evidence that they are consistently underpriced. However, underpricing of IPOs is a well-documented phenomenon outside of converting institutions or financial institutions. Some theoretical works suggest that the underpricing of IPOs is associated with asymmetric information and investors' concerns that the decision to issue equity is an attempt to expropriate wealth from outsiders (Ibbotson, et al., 1994). Empirical studies have found evidence that the underpricing for IPOs of financial institutions is related to proxies for asymmetric information. Offer size (Megginson & Weiss, 1991), age of the firm (Muscarella & Vetsuypens, 1987; Barry & Brown, 1984; Megginson & Weiss, 1991) underwriter reputation (Carter & Manaster, 1990; Logue, 1973; McDonald & Fisher, 1972), and the volatility of post-offer returns (Ritter, 1984) have all been associated with IPO underpricing.

If insiders profit by setting the initial offer price too low, IPOs associated with conversion should be more underpriced than IPOs of other financial institutions with similar levels of asymmetric information. Alli, Yau, and Yung (1994) report that conversion related IPOs are priced similarly to IPOs of nonfinancial institutions, but conversion-related IPOs are significantly more underpriced than IPOs of other financial institutions. The average underpricing reported was 7% for converting thrifts and 5% for other financial institutions. The other financial institutions include banks, bank holding companies (BHCs), and other thrifts. They argue that the lower level of underpricing for IPOs of other financial institutions reflects reduced uncertainty as the result of regulation. They further suggest that this regulation effect is offset for converting institutions by a one-time economic gain that may result from conversion.

Unlike the Alli, Yau, and Yung (1994) study, this study does not include BHCs. BHCs differ from banks in several ways which may influence uncertainty or asymmetric information surrounding initial offerings by these institutions. These include the ability of BHCs to "downstream" borrowed capital as equity for subsidiary banks and engage in nonbanking activities via nonbank subsidiaries. Evidence provided by Polonchek, Slovin, and Sushka

(1989) suggests that capital standards reduce the underpricing of seasoned bank stocks relative to those of nonfinancial firms because leverage restrictions of banks inject noise into the negative information conveyed by the announcement to issue equity. Similarly, the ability of a bank subsidiary to receive equity capital from its parent may affect the information conveyed by the announcement of a security issue. Also, if regulations reduce the level of asymmetric information, the restrictions of the BHC Act and its amendments may have an effect.

III. DATA AND METHODOLOGY

Our sample is chosen from the list of fully underwritten depository institution equity IPOs reported in the *Directory of Corporate Financing*, published by Investment Dealer Digest, for the period January 1982 through December 1994. Conversion status was determined using the "History" section of each institution in *Moody's Bank and Finance Manual.* Thrift conversions were verified using a list of approved conversions from the OTS and the Lexis/Nexis database. The type of each depository institution was determined using both *Moody's Bank and Finance Manual* and *Ward's Business Directory*. The financial institutions include savings and loans, savings banks, and commercial banks (SIC 6021, 6022, 6035, and 6036 at the time of the initial offer).

Ideally, our test of the influence of the conversion process on pricing of IPOs requires a sample of converting thrifts and a control sample of IPOs of other thrifts, that is, thrifts that did not operate previously as a mutual. Asymmetric information in converting thrifts should be the same as that of other thrifts, unless the conversion process influences the dissemination of information. However, due to the small number of initial offers by other thrifts, we expand the control sample to include IPOs of commercial banks. Commercial banks are similar to thrifts in that they are subject to similar regulatory restrictions and requirements, though regulatory authority may differ. Both institutions also have similar sources of funds, though concentration of their loan portfolios differs. It is not clear how differences in the asset structures of the two types of institutions would affect the market's ability to value initial offers of stock. The sample of other financial institutions includes commercial banks, as well as thrifts that did not operate previously as a mutual.

Our analysis of the initial returns employs two econometric models. Model 1, below, uses an indicator variable (CONVRSN) to distinguish offers of converting thrifts.

Model 1:

$$R_i = ß_0 + ß_1\, CONVERSN_i + ß_2\, LOFSIZE_i + ß_3\, AGE_i + ß_4\, REPUTE_i + ß_5\, STD_i + \varepsilon_i \quad (1)$$

where

R_i = *(closing price on the first day of trading)/(offer price) -1*, for firm I.

CONVERSN = 1, if the IPO is offered by a converting thrift, and 0, otherwise.

LOFSIZE = the natural log of the product of offer price and number of shares issued.

AGE = the number of years from establishment of the firm until the IPO.

REPUTE = 1, if the lead underwriter is among the top 15 underwriters for the year of offer in terms of market value, and 0, otherwise.

STD = the standard deviation of daily returns for the first 20 trading days following the initial trading day (days 1-20).

Offer size, age of the institution, investment banker's reputation, and post-offer volatility of returns have been shown to be associated with the initial return of IPOs. We use the natural log of the dollar amount of the initial equity offering (LOFSIZE) as reported in the *Directory of Corporate Financing*. The variable AGE is the difference between the year of the IPO and the year of the institution's establishment, reported in *Moody's Bank and Finance Manual*. Investment banker reputation (REPUTE) is measured according to the ordinal scale developed in Carter and Manaster (1990). Their procedure uses the underwriter listing position in the tombstones to rank investment bankers. Our methodology is a variation of the adaptation of the Carter and Manaster scale presented in Megginson and Weiss (1991). Using the *Directory of Corporate Financing*, the top 15 underwriters, in terms of total market value of offerings, were identified for each of the thirteen sample years. For each year, the top 15 underwriters are deemed to be of high reputation, while all others are not. The lead investment banker for each IPO and the offer price and issue size were collected from the *Directory of Corporate Financing*. Since the *Directory of Corporate Financing* discontinued reporting the lead underwriter in 1991, *Moody's Bank and Finance Manual* was used to obtain this information for subsequent years. Volatility of the post-offer returns is captured by the variable STD. STD is the standard deviation of the returns for the 20 days following the first day of trading, days 1-20, where day 0 is the first day of trading.

The closing price on the first day of trading and the subsequent 20 days of returns were obtained from the CRSP data tapes. The unadjusted percentage change between the offer price and the closing price on the first day of trading is used to analyze the degree of underpricing of the IPOs. Beatty and Ritter (1986) show that a market adjustment of the IPO initial return is less than 0.1% and has an insignificant impact on the calculation of the degree of underpricing.

Model 2 accounts for the high correlation between the variables for reputation and offer size by eliminating the offer size variable. Estimation of the two models is repeated for the broader control sample of commercial banks and thrifts.

IV. RESULTS

Table 1 provides summary statistics for the sample of IPOs. Converting thrift institutions are substantially older than the banks at the time of the initial offering. Commercial banks are the largest firms in the sample in terms of average total assets, while thrifts are larger when comparing medians. All subsamples of depository institutions experience average underpricing that is different from zero at the 1% level of significance. The level of underpricing for financial institutions is similar to that reported in previous empirical studies (Aharony, et al., 1996; Alli, et al., 1994; Maksimovic & Unal, 1993). The mean return for the converting thrift IPOs in the sample, 7.0%, is not significantly different from the mean return of IPOs of other financial institutions, 5.7% ($t = 0.51$).

TABLE 1
Summary Statistics for Sample of 152 Initial Public Offerings of Common Equity by Commercial Banks, and State and Federal Chartered Thrifts Made Between 1982 and 1994

	Thrifts and Commercial Banks n = 152	*Thrifts n = 119*	*Commercial Banks n = 33*	*Converting Thrifts n = 107*	*Commercial Banks and Other Thrifts n = 45*
Age (years)					
Mean	38	44	15	47	17
Median	33	50	4	53	4
Assets (millions)					
Mean	$1,940	$1,181	$4,681	$1,157	$3,805
Median	$424	$486	$274	$486	$275
Offer Size (millions)					
Mean	$20.31	$21.02	$17.71	$21.96	$16.38
Median	$9.00	$9.53	$6.60	$9.53	$7.70
Under Pricing (day = 0)					
Mean‡	6.6%	6.9%	5.4%	7.0%	5.7%
	(7.47)*	(7.10)*	(2.62)*	(7.02)*	(3.10)*
Median	2.2%	2.3%	1.5%	2.6%	1.8%

Notes: *T*-test for underpricing is Ho: Mean of (Closing price first day of trading - Offer price) / Offer price = 0.
‡ *T*-statistic for test: Mean = 0, in parentheses.
* Significant at 1% level, one-tail test.
The difference in mean returns between thrift and commercial bank IPOs = 1.5%, *t*-statistic = 0.49.
The difference in mean returns between converting thrift IPOs and IPOs of other financial institution = 1.3%, *t*-statistic = 0.51.

Table 2 provides results of tests of differences in underpricing between converting thrifts and other financial institutions when offer size, age of the firm, underwriter reputation, and post-offer standard deviation of returns are included as explanatory variables. Panel A provides results for thrift institutions only. Converting thrift IPOs are found not to be priced differently from IPOs of other thrifts (CONVERSN = -0.001, t = -0.17). The proxy for reputation is significant at the 10% level (REPUTE = -0.032, t = -1.50), indicating that IPOs of thrifts underwritten by bankers with greater market share provide lower initial returns. Also, the variable for post-issue volatility is significant at the 1% level (STD = 3.44, t = 3.32), suggesting that higher initial returns are associated with relatively greater risk. Model 2 in Panel A does not include LOFSIZE due to the positive correlation between the size of the equity offer and the reputation variable (correlation coefficient = 0.51, p-value = 0.0001). The reputation variable is significant at the 1% level (REPUTE = -0.048, t = -2.56). The omission of LOFSIZE does not affect the other results.

Panel B contains the results of our analysis comparing initial returns of converting thrifts to those of other thrifts and commercial banks. A test of residuals reveals the presence of heteroskedasticity in Model 1. In the presence of heteroskedasticity, the coefficient estimates are accurate, but the test statistics are not. A correction procedure suggested by White (1980) adjusts the test statistic by producing a consistent estimate of the covariance matrix. The asymptotic t-statistics obtained from this method are reported.

TABLE 2

Panel A. Thrifts

Regression Results for a Sample of 119 Thrift IPOs From 1982 Through 1994, Where Initial Return is the Dependent Variable

	Intercept	*CONVERSN (n = 107)*	*LOFSIZE*	*AGE*	*REPUTE (n = 60)*	*STD*	*Adj R^2 Prob>F*
Model 1	0.049	-0.001	-0.013	0.000	-0.032	3.44	0.1037
	(1.33)	(-0.17)	(-1.43)	(0.22)	(-1.50)***	(3.32)*	0.0037
Model 2	0.029	-0.007		0.000	-0.048	3.51	0.0959
	(0.85)	(-0.21)		(0.04)	(-2.56)*	(3.37)*	0.0037

Panel B. Banks and Thrifts

Regression Results for a Sample of 152 Thrift and Commercial Bank IPOs From 1982 Through 1994, Where Initial Return is the Dependent Variable

	Intercept	*CONVERSN (n = 107)*	*LOFSIZE*	*AGE*	*REPUTE (n = 69)*	*STD*	*Adj R^2 Prob>F*
Model 1	0.043	0.0001	-0.017	0.0001	-0.010	3.30	0.1001
	(1.74)***	(0.004)	(1.42)	(.036)	(0.39)	(3.29)*	0.0010
Model 2	0.012	0.001		0.000	-0.029	3.41	0.0826
	(0.58)	(0.06)		(0.12)	(-1.62)***	(3.87)*	0.0022

Notes: * Significant at 1% level, one-tail test. *** Significant at 10% level, one-tail test. Return = (Price at close of first day of trading/Offer Price) -1.0. CRSP provides the closing price on day t or the average of the bid/ask prices. CONVRSN = 1, if the thrift IPO was preceded by the conversion of the thrift from mutual ownership to stock ownership, 0 otherwise. LOFSIZE = the natural log of the product of offer prices and number of shares offered. AGE = Year of IPO - Year of establishment. REPUTE = 1, if the lead underwriter is among the top 15 in market value listed in the Directory of Corporate Finance for year of issue, 0 otherwise. STD is the standard deviation of the first 20 returns relative to the day of trading. Regression models were tested for heteroskedasticity. Panel B, Model 1 exhibits heteroskedasticity. Asymptotic t-statistics are reported based on White (1980). The adjustment results in test statistics which are positive, regardless of the sign of the coefficient.

The results in Panel B are consistent with those in Panel A. Conversion is not found to affect initial returns, while underwriter reputation and post-offer volatility are both associated with underpricing.

After controlling for factors associated with asymmetric information, we find no evidence that conversion significantly affects IPO underpricing. This suggests that the act of conversion does not significantly influence the initial returns of IPOs of financial institutions. This result contrasts with Alli, Yau, and Yung (1994) who report conversion-related IPOs are significantly more underpriced than IPOs of other financial institutions.

VI. CONCLUSION

The results of the study indicate that initial stock offers of converting thrifts are not priced differently than IPOs of other financial institutions. From 1982 through 1994 fully underwritten, conversion-related IPOs were underpriced, on average, approximately 7%. The evidence is inconsistent with claims that abnormal or windfall gains accrue to investors in

conversion-related IPOs. Thus, there is no support for the assertion that managers of converting financial institutions gain at the expense of depositors by setting IPO offer prices too low. Conversion-related IPOs do provide the opportunity for depositors to participate in an IPO without competition from institutional investors. The results suggest that, in evaluating conversion-related IPOs, depositors and regulators should focus on issues other than offer price.

Acknowledgments: We wish to thank Cyndi McDonald, James Wansley, Charlene Sullivan, and the anonymous referees for their suggestions. Thanks also to John Callahan for his assistance.

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