FINANCE SUBSIDIARIES IN THE THRIFT INDUSTRY*

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The purpose of this paper is to examine the creation of finance subsidiaries for savings and loan associations. Finance subsidiaries have existed in other industries for a number of years but are relatively new in the thrift industry. The subsidiary can access capital markets by selling dutch rate auction preferred stock (DARPS) at rates more favorable than the parent can obtain. This paper also contains a case study of a thrift that is very successful in raising new capital through a finance subsidiary.

A finance subsidiary is a wholly-owned company whose primary purpose is to finance the sales of the parent's products. Although the automobile industry has used finance subsidiaries since the early 1900s, the Federal Home Loan Bank Board (FHLBB) has only recently allowed federally insured savings institutions (S&Ls) to create special purpose wholly-owned finance subsidiaries. These subsidiaries can raise capital by issuing securities at rates generally lower than the S&Ls can offer. Dutch auction rate preferred stock (DARPS) is a financial instrument that may be issued by finance subsidiaries. When Alderson, Brown, and Lummer examined the characteristics and returns of DARPS, their analysis implied

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that DARPS provides an after-tax return for taxable corporate investors that is superior to the return on commercial paper. They also concluded that DARPS is a valuable investment vehicle for raising capital for zero tax issuers. Our paper examines the creation of S&L finance subsidiaries, the securities issued by finance subsidiaries, the dutch auction process, and describes how a failing S&L created a finance subsidiary and issued DARPS to raise new capital at very low rates. Given the recent financial distress of many S&Ls, the information set forth in the paper may encourage managers to examine captive financing in the thrift industry.

I. CREATION OF FINANCE SUBSIDIARIES

Captive finance companies have been a frequent subject of academic research. Andrews and Lewellen analyzed the operating arrangement between a parent and its captive to determine whether debt capacity was increased. Kim, McConnell, and Greenwood examined the subsidiaries' impact on the parent companies' stockholder and bondholder returns. They concluded that formation of a captive violated "me-first" rules and resulted in a gain to shareholders. Beranek and Clayton examined whether the market incorporates the subsidiaries' debt when assessing the parents' risk. They found that the market betas of companies providing only consolidated data are significantly higher than firms providing both consolidated and parent-only data. In a recent study, Comiskey, McEwen, and Mulford showed that the market performs a consolidation of unconsolidated finance subsidiary debt in assessing the degree of financial leverage employed by parent firms. Fooladi, Roberts, and Viscione undertook to summarize the relevant research on captives and provide direction for future research. In the first article dealing with finance subsidiaries in the thrift industry, Merriman has described the numerous legal considerations in establishing an S&L finance subsidiary. The Housing and Urban Development Act of 1968 in essence created finance subsidiaries for the thrift industry when it restructured the Federal National Mortgage Association (Fannie Mae) and created the Government National Mortgage Association (Ginnie Mae). Ginnie Mae and Fannie Mae were formed in an attempt to create a viable secondary mortgage market that would allow an S&L to raise money indirectly in the capital market. Soaring interest rates and low housing starts in the 1970s were disastrous for financial institutions. Many faced collapse when their cost of funds rose higher than the yield on their loan portfolios. Regulations such as the Monetary Control Act of 1980 and the Garn-St.Germain Depository Institution Act of 1982 were passed to reduce a financial institution's interest rate vulnerability. Although these new regulations were helpful, the need to raise additional money remained. In December 1985 the Federal Home Loan Bank Board, in an attempt to allow thrift institu-

tions easier access to capital markets, revised its definition of a finance subsidiary retroactive to July 1984.[1]

> *Finance subsidiary means a Federal association's subsidiary subject to the provisions of this section whose sole purpose is to issue securities that the association is authorized to issue directly (or, if the parent association is a mutual association, would be authorized to issue if converted to the stock form) and to remit the net proceeds of such securities to its parent association.*

The Bank Board extended this regulation in 1986 to include all insured savings institutions. These regulations allow insured savings institutions to create captive finance companies that are similar to industrial finance subsidiaries.

II. ISSUES IN ESTABLISHING A FINANCE SUBSIDIARY

Bank Board regulations restrict the amount of assets the S&L can transfer to the subsidiary, specify the type of assets transferred and the accounting procedures for transferring them, and require corporate separateness. A parent company can, for example, transfer up to 30% of its book value to its finance subsidiary. The market value of these assets, however, cannot exceed 250% of the gross proceeds raised from issuing securities by the subsidiary. The Bank Board also requires that, except for calculating the regulatory capital requirement, a finance subsidiary keep its accounts separate from those of its parent institution. The assets transferred from the S&L typically are fixed rate, long-term Federal Home Loan Mortgage Certificates and Government National Mortgage Association Certificates. Holding these valuable assets will enable the subsidiary to access the capital market at rates more favorable than the parent could command.

Bank Board regulations prohibit a subsidiary from issuing any security whose payment, maturity, or redemption may be accelerated if its parent savings institution is insolvent or has been placed into receivership. The Federal Home Loan Bank Board has issued a "comfort letter" stating that in the event the parent S&L is insolvent, the assets of the finance subsidiary would be left alone. This requirement of corporate separateness allows the securities issued by the subsidiary to receive a high credit rating. In fact, the credit rating of the subsidiary's securities may be

[1]The Housing and Urban Development Act of 1968 authorized federal saving institutions to issue various obligations, including stock, to raise capital. While the Act was silent on the creation of finance subsidiaries, the Bank Board's position is that if the savings institution can sell stock, they have the authority to create a subsidiary to do the selling. For a more detailed discussion, see Merriman.

higher than the parents' since the subsidiary has valuable assets of the parent but not the liabilities.

III. SECURITIES ISSUED BY FINANCE SUBSIDIARIES

An S&L's finance subsidiary may issue collateralized mortgage obligations and adjustable rate preferred stock. New securities, such as collateralized commercial paper, are being developed by the financial community.

Collateralized mortgage obligations (CMOs) are long-term bonds of varying maturities that are secured by mortgage securities. The CMOs are retired by the cash flow produced by the mortgages. The rates paid on CMOs are generally lower than the rates earned on the mortgages.

Interest rate risk has historically caused the short-term corporate investor not to purchase preferred stock. Principal stability is lost during periods of rising interest rates. Also, unless a corporation was willing to refinance, corporations which issued fixed rate preferred stock were locked in when rates were declining. Dutch auction rate preferred stock (DARPS) was developed in August 1984 to mitigate the shortcomings of ordinary preferred stock. DARPS is designed to adjust to current interest rate levels on a 49 day cycle without causing principal fluctuation. There is no active secondary market for DARPS; therefore, all offers to buy and sell are based on the original issue price ($100,000 or $500,000).

Potential buyers of DARPS submit a bid by specifying the number of shares they want to buy. They also specify the dividend rate they are willing to accept for the 49 day period. The buyer will not receive a lower rate than submitted, but he may receive a higher rate since all preferred carries the same dividend rate. A current holder of DARPS has several options at the auction. They are (1) hold – regardless of the new rate, (2) bid – hold if the new rate is not below a specified rate, or (3) sell – regardless of the new rate. A seller will receive his original investment plus the dividend earned during the previous 49 day period. If the auction fails, i.e., more sellers than buyers, the dividend rate is set at a designated percentage of the 60 day AA composite commercial paper rate.

Buyers of DARPS are mostly corporations who are entitled to exclude 70% of preferred dividends received from taxable income. The dividend rate on DARPS is the composite rate on 60 day commercial paper adjusted to reflect this exclusion of dividends received. Since investors will demand the same after-tax yield on investments of equal risk, the after-tax yield on commercial paper must equal the after-tax yield on DARPS of the same risk. This yield requirement can be stated as:

$$(1 - t)\, i_{CP} = i_{DARPS} - t(1 - d)i_{DARPS} \qquad (1)$$

TABLE 1

Percent of Commercial Paper Rate Assuming Various Dividend Exclusions and Tax Rates

	Tax Rate			
DIV EXCLUSION	**.30**	**.34**	**.40**	**.46**
.85	.73	.70	.64	.58
.80	.75	.71	.65	.59
.75	.76	.72	.67	.61
.70	.77	.74	.68	.63
.65	.78	.75	.70	.64
.60	.80	.76	.71	.66
.55	.81	.78	.73	.68
.50	.82	.80	.75	.70

Under the current tax law 70% of the dividend is excluded.

Simplifying equation 1 yields,

$$(1 - t)\, i_{CP} = (1 - t(1 - d))i_{DARPS} \tag{2}$$

where: t = corporate tax rate,
i_{CP} = commercial paper rate,
i_{DARPS} = dividend rate on DARPS,
d = percentage of dividends received that is excluded from taxes.

Stating the dividend rate on DARPS, i_{DARPS}, as a percent of the commercial paper rate, i_{CP}, can be written as:

$$\frac{i_{DARPS}}{i_{CP}} = \frac{1 - t}{(1 - t(1 - d))} \tag{3}$$

Currently, seventy percent of the dividend on DARPS is excluded from income for corporate purchasers. Therefore, using equation 3 , a corporate investor in the 34% tax bracket will require at least 74% of the AA Commercial Paper rate if the risk between the two investments is the same. Table 1 illustrates acceptable yields assuming various dividend exclusions and tax rates.

The primary purchasers of DARPS are corporations. The dividend exclusion and principal stability are attractive to short-term corporate

investors. Corporate investors in the 34% tax bracket retain 89.8% of the dividend after taxes and their taxable equivalent yield on a AAA rate DARP yielding 7% pre-tax would be:

$$.07 \times .898/(1 - .34) = .0952 \text{ or } 9.52\%.$$

The tax adjusted yields on DARPS is usually higher than the yields on commercial paper.

Alderson et al. have examined the recent popularity of DARPS. Although their research concentrated on DARPS as an investment, they noted that zero tax issuers could benefit from selling DARPS. The Internal Revenue Service permits a subsidiary and its parent to consolidate income if the parent owns at least 80% of the subsidiary's stock; so an S&L that has carryover losses can structure a finance subsidiary that will allow for income consolidation. Issuing DARPS in these circumstances will allow the S&L to earn income from the money raised by the subsidiary, but pay no taxes on the income. Thus, the issuer benefits from paying a lower after-tax rate, and the purchaser benefits by receiving a higher after-tax return when compared to money market instruments of the same quality.

IV. THE CASE OF PATHWAY FINANCIAL

The following is an example of an S&L that had substantial operating loss carryovers. To reduce its interest rate risk and to control its credit risk, the S&L formed a finance subsidiary that would issue adjustable rate preferred stock. The S&L has been extremely successful in raising capital at low rates.

Pathway Financial is a federally insured mutual savings and loan association located in Chicago, Illinois. Pathway was created in 1982 by a merger between Crawford Savings, Prairie Federal Savings and Loan Association, and Chicago Federal Savings and Loan Association. Pathway's principal business is to attract funds in the form of deposits and to invest these funds in residential mortgages and other real estate. Owing to volatile interest rates during the 1970s, Pathway's merger resulted in $134.34 million of operating loss carryovers. Table 2 details the loss carryovers and the date the carryovers will expire. On March 31, 1985, Pathway's assets were approximately $1.3 billion and its regulatory net worth was $31.4 million. Although its net worth was $5.9 million below the regulatory minimum, the Bank Board had not imposed any regulatory restrictions because of the deficiency.

Given Pathway's operating conditions and closeness to in-solvency, raising new capital would probably be difficult and costly. In December 1984, Pathway Financial created a limited purpose finance subsidiary, Pathway Capital Corporation. Pathway Capital was organized as a Delaware corporation for the sole purpose of issuing shares of short-term

TABLE 2

Pathway Financial Operating Loss Carryovers Period Ended 12/31/83

Company Name Prior to Merger	Net Loss Carryovers*	Date Carryovers Expires
Pathway Financial	$31.394	12/31/88
	2.472	12/31/85
Prairie Federal	3.588	12/31/86
	18.808	12/31/85
Chicago Federal	12.507	12/31/86
Crawford S&L	18.298	12/31/86
Chicago Federal	43.945	12/31/87
Sub-Total	$131.012	
Other Subsidiaries	3.331	12/31/95–98
Total	$134.343	

* In millions
SOURCE: Pathway Financial

auction rate cumulative preferred stock (STAR Preferred) and managing eligible assets. All of Pathway Capital's common stock is owned by Pathway Credit Corporation, a wholly-owned subsidiary of Pathway Financial. Thus Pathway Capital is a second-tier subsidiary operating through a first-tier subsidiary. That operating structure was established to assure that compliance with the SEC's 55 percent whole pool requirement in the event subordinated debt or other non-mortgage loan items were injected into the finance subsidiary structure.

Pathway Capital was authorized to issue 1,000 shares of common stock; however, only one $10,000 share was sold to Pathway Credit Corporation. Through Pathway Credit, Pathway Financial also contributed approximately $48.1 million in cash and other assets to the capital of Pathway Capital.

Pathway Capital was authorized to issue 500 shares of STAR Preferred at a purchase price of $100,000 per share. STAR Preferred carries a AAA rating by Standard and Poor's Corporation and aaa by Moody's Investors Services. The dividend rate for STAR Preferred is reset every 49 days by dutch auction. The rate established by the auction will not be greater than 110% (under certain circumstances 125%) or lower than 58% of the AA Composite Commercial Paper rate at the day of the auction. Proceeds of the auction are invested by Pathway Capital in eligible assets which include: Federal Home Loan Mortgage Company Certificates, Federal National Mortgage Association Certificates, Government National Mortgage Association Certificates, U.S. Treasury Securities, and Short-Term Money Market Instruments. By investing in these securities,

Pathway Capital avoids being regulated as an investment company under the Investment Act of 1940.[2] The income generated by the eligible assets is used to pay dividends on the preferred and common stock. Pathway Financial uses the common stock dividends it receives to invest in residential mortgages and other real estate. Pathway Capital is required to maintain a level of eligible assets that have a market value substantially in excess of the liquidation value of the outstanding shares of STAR Preferred. In the event minimum asset coverage is not maintained, Pathway Capital will be required to redeem the appropriate number of shares to re-establish minimum asset coverage. Pathway Capital also has the right of optional redemption in the event that the dividend payment exceed the AA composite Commercial Paper Rate. This optional redemption feature serves as protection for Pathway Capital in the event the dividend rate exceeds the rate earned on eligible assets. Pathway Capital began selling STAR Preferred in August 1985. Table 3 shows the results of all the dutch auctions of Pathway's STAR Preferred. The rates paid by Pathway Capital indicate that the stock is well received by the market. The rate paid by Pathway Capital has been in the expected range relative to AA Composite Commercial Paper rate. All auctions, except one, have resulted in rates less than the composite rate. The auction of December 9, 1987 resulted in a rate that was 103.15% of the composite. A possible explanation for the December auction results was concern by auction participants over pending tax bills that would have limited preferred stock benefits.

The Board of Directors of Pathway Capital were concerned about the results of the December 9th auction. If future auctions had similar results, redemption of the stock may be necessary. Fortunately, the fears of the market had been relieved by the January 27th auction. As seen in Table 3, the auction resulted in a rate that was 80.73% of the commercial paper rate.

Table 4 lists the dividend payment dates, the dividends paid on the preferred and common stock, and the year-end income of Pathway Capital. The results shown in Table 4 indicate that Pathway Capital has been very successful in using the proceeds from the sale of its preferred stock to purchase eligible assets. Since the first auction of August 1985, Pathway Capital has earned $28.9 million. They have paid $11.3 million in preferred stock dividends and $16.2 million in common stock dividends. All of the common stock dividends paid to Pathway Credit have been tax-free due to Pathway Financial's loss carryovers. Since many of the loss carryovers would have expired unused, the creation of Pathway Capital and the use of STAR Preferred allowed utilization of these losses.

[2]The subsidiary avoids considerable expense when it is not classified as an investment company. Merriman also notes that it would be difficult for a subsidiary of this type to fully comply with the Act.

TABLE 3

Pathway Capital Results of STAR Prefferred Auctions
August 1985–May 1989

Auction Date	STAR Prefferred Rate	Commercial Paper Rate	Star Rate as % of CP Rate
08/15/85	6.50%	7.75%	83.87%
10/16/85	7.00	7.7975	87.77
12/04/85	7.50	8.058	93.08
01/22/86	6.19	7.872	78.63
03/12/86	5.00	7.246	69.00
04/30/86	5.23	6.643	78.73
06/18/86	4.69	6.817	68.80
08/06/86	4.351	6.316	68.89
09/24/86	4.25	5.827	72.94
11/12/86	3.75	5.857	64.03
12/29/86	5.24	6.653	78.76
02/18/87	4.56	6.337	71.96
04/08/87	4.65	6.255	74.34
05/27/87	5.15	7.011	73.46
07/15/87	4.56	6.653	68.54
09/02/87	4.80	6.971	68.86
10/21/87	5.55	7.462	74.38
12/09/87	7.951	7.708	103.15
01/27/88	5.52	6.838	80.73
03/17/88	5.701	6.684	85.29
05/04/88	5.651	7.042	80.25
06/22/88	6.21	7.585	81.87
08/10/88	6.651	8.16	81.51
09/28/88	6.79	8.232	82.48
11/16/88	7.35	8.736	84.13
01/04/89	7.51	9.148	82.09
02/22/89	7.75	9.529	81.33
04/12/89	10.015	8.30	82.88
05/31/89	9.55	7.578	79.35

SOURCE: Pathway Financial

V. CONCLUSIONS AND IMPLICATIONS

This paper examined how an S&L could raise new capital through a finance subsidiary. We also discussed how an S&L with substantial op-

TABLE 4

Pathway Capital Income and Dividends Paid October 1985–June 1989

Date	STAR Pfd. Div. Paid	Common Stock Div. Paid	Net Income
10/17/85	$577,780	$ 300,000	$
12/05/85	476,390	1,000,000	
12/31/85			3,338,308
01/23/86	510,415	700,000	
03/13/86	421,264	1,000,000	
05/01/86	340,280	750,000	
06/19/86	355,931	1,000,000	
08/07/86	319,181	300,000	
09/25/86	296,042	750,000	
11/13/86	289,236	500,000	
12/30/86	244,792	300,000	7,665,862
02/19/87	371,167	800,000	
04/09/87	310,333	800,000	
05/28/87	316,458	800,000	
07/16/87	350,486	600,000	
09/03/87	310,333	700,000	
10/22/87	326,667	700,000	
12/10/87	377,710	400,000	
12/31/87			7,329,702
01/28/88	541,110	300,000	
03/17/88	375,667	500,000	
05/04/88	387,985	300,000	
06/23/88	384,580	300,000	
08/11/88	422,625	300,000	
09/29/88	452,640	300,000	
11/17/88	462,095	600,000	
12/31/88			7,535,683
01/05/89	500,210	500,000	
02/23/89	511,095	500,000	
04/13/89	527,430	500,000	
04/30/89			3,001,189
06/01/89	564,860	700,000	
Total	$11,324,762	$16,200,000	$28,870,744

Source: Pathway Financial

TABLE 5

Thrift Institutions Selling DARPS

Parent Company	Issue	Location
Aurora Federal S&L	AFS Financial	Aurora, IL
American Savings Bank	ASB Funding	New York, NY
Anchor Savings	Anchor Capital	New York, NY
Buckeye Federal S&L	Buckeye Capital	Columbus, Ohio
Centrust Savings Bank	Centrust	Miami, FL
Clyde Federal S&L	Clyde Financial	North Riverside, IL
Community Federal S&L	Comfed	St. Louis, MO
Crossland Savings	Crossland	Brooklyn, NY
The Dime Federal S&L	Dime Funding	Brooklyn, NY
Dollar Bank FSB	Dollar Finance	Pennsylvania
Empire of America FSB	Empire and EOA	Deland, FL
First Minnesota Savings Bank	FFM Finance	Minneapolis, MN
First American Savings Bank	First American	Greensboro, NC
Florida Federal S&L	Florida Federal	Clearwater, FL
Fulton Federal S&L	Fulton Capital	Atlanta, GA
Goldome Federal S&L	Goldome NY Capital	Buffalo, NY
Great American FSB	GreatAmerican	Oak Park, IL
Homewood Federal S&L	Homewood	Homewood, IL
Landmark Savings Assoc.	Landmark	Pittsburgh, PA
Meritor Savings Bank	Meritor	Arlington, VA
Mid-America Federal S&L	Mid-America	Columbus, OH
Olympic Federal S&L	Olympic	Berwyn, IL
Pathway Financial S&L	Pathway Capital	Chicago, IL
Pioneer Savings Bank	Pioneer	Clearwater, FL
St. Charles S&L	St. Charles Finance	Chicago, IL
Talman Home Federal S&L	Talman Finance	Chicago, IL
United Savings of America	USA Capital	Illinois
Vermont Federal S&L	VF Funding	Baltimore, MD

Source: Oppenheimer & Co., Inc.

erating loss carryovers could issue DARPS at very low after-tax rates. The advantages of DARPS should be attractive to thrift institutions, particularly to mutual savings associations since they cannot raise capital directly through any issuance of stock, common or preferred. Table 5 contains a list of thrifts that have created finance subsidiaries.

Since a finance subsidiary can access capital markets at more favorable rates than the parent can obtain, why haven't more S&L's created finance subsidiaries? Several reasons may account for this small number. It appears that a net operating loss carry forward is a necessary condition to finance subsidiary preferred stock funding. The institution, however, need not be in a failing mode. Given the number of institutions that have experienced losses in recent years many more institutions than those listed in Table 5 should be interested in creating a finance subsidiary.

Merriman suggests that the complexity and cost of establishing a finance subsidiary may deter many: expenses may equal a minimum of 75 basis points of the dollars raised. In addition, there is no guarantee that DARPS auctions will always be successful. Manny Hanny, a finance subsidiary owed by Manufactures Hanover, had to redeem its preferred stock. The reason for this redemption was because the dividend rate had soared to 117% of the 60 Day AA Composite Commerical Paper rate. Moody's Investors Service had lowered its preferred rating from A2 to BAA1. The downgrades were a result of the bank's debt exposure to less developed countries. Nonetheless, all S&Ls should be aware of the benefits of establishing a finance subsidiary.

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