

Corporate Motives In Bond Refunding And Calling: A Survey

by

Joseph D. Vu
University of Illinois at Chicago

Abstract

This paper provides the results of a survey of corporations which called nonconvertible bonds in the period from 1962 to 1978. The survey shows that interest saving is the most important motive for calls and refundings. Moreover, the evidence indicates that there are profitable opportunities to call bonds trading at a discount. The survey may help resolve conflicting results in evaluating the bond refunding process.

I. INTRODUCTION

In recent years, the subject of corporate bond calling and refunding has been prominent in the literature. Most papers are concerned with the evaluation of bond refunding. Bowlin (1966) argues that in evaluating bond refunding, the after-tax saving should be discounted at the after-tax cost of debt and compared with the after-tax cost of refunding. On the other hand, Gordon (1974) contends that the after-tax saving should be discounted at the before tax cost of debt. Lewellen and Emery (1981) use the notion of parity among alternative financial obligations to resolve the refunding controversy. They argue that either the pre-tax market interest rate or the after-tax rate can be used in the present value calculations as long as the correct specification of the corresponding freed-up debt service cash flows is made. Lewellen and Emery claim that the evaluation of bond refunding can be easily accomplished if the firm can issue new debt in an amount that would provide exactly the same future after-tax cash flows to cover principal and interest associated with existing debt.

A controversial issue in the evaluation of bond refunding is the effect of the source of financing for the refunding costs. Van Horne (1974, p. 350) and Weston and Brigham (1975, p. 459) assume that the refunding costs are financed by retained earnings. On the other hand, Bowlin (1966) argues that the refunding costs are financed by debt. Bierman (1972) contends that the method of financing is irrelevant to the evaluation of refunding. Ofer and Taggart (1977) argue that the evaluation of refunding shall include both the firm's stream of interest and its debt capacity. This new approach allows for interactions between investment and financing decisions.

Another related issue in refunding is whether there are profitable opportunities to refund bonds trading at a discount. Ang (1975) claims that it is possible for a firm to refund profitably even when current interest rates rise above the original coupon rate. Mayor and McCoin (1978) demonstrate that refunding when the market interest rate exceeds the coupon rate cannot be advantageous to the firm in the single period case, and extremely unlikely to be profitable in the multiperiod case. Although the above issues are important and interesting, most papers overlook the corporate motives in bond call-

ing and refunding. Knowing these motives may help resolve conflicting issues that cannot be easily done on a theoretical basis. Johnson and Kleim (1978) propose three possible motives for repurchases of discounted bonds. These motives are: (a) inflating current earnings at the expense of future earnings, (b) improving the firm's financial ratios, and (c) obtaining favorable results as measured by the discounted cash flow analysis. Because Johnson and Kleim limit their analysis on open market repurchases of bonds selling below par value, their proposed motives may not be able to generalize to cases of bond refunding and calling. Furthermore, these authors do not provide any empirical results.

The purpose of this paper is to provide a direct answer on the individual firm's motives for calls by sending a survey to all firms which called straight bonds in the period from 1962 to 1978. The motives for calls become an important issue to stockholders and bondholders because in a study of nonconvertible bond calls, Vu (1983) finds that seventy-five percent of straight bonds are called when their market value is below the call price. Since the holders of the called bond benefit from this event, they would be interested in a model that can predict when such calls will occur (1). On the other hand, stockholders would question the firm's motives for calls, and want to know if their wealth is transferred to bondholders. Stockholders may demand more protection from government regulations because at the present time, the Securities and Exchange Commission has no specific requirements concerning bond calls.

Section 2 describes the data. Section 3 shows the results of the survey. Section 4 gives the conclusion and implications of the survey.

II. DESCRIPTION OF DATA

Data on all straight bonds called for redemption during the period 1962-1978 are collected from the Moody's Manuals, Moody's Bond Survey, the Standard & Poor's Corporate Bond Guide, and the Standard & Poor's Called Bond Record. In selecting the sample, four criteria are applied:

- 1) The entire bond is called for redemption. Partial redemptions and open market repurchases are not investigated because they are usually used to satisfy sinking fund provisions, which have different economic consequences from a call that eliminates the entire bond.
- 2) The call has an identifiable announcement date with no other firm's specific event reported in the three days surrounding the announcement date.
- 3) Daily data on stock price are available on the Center for Research in Security Prices (CRSP) tapes.
- 4) The called bonds must have market price available around the announcement date.

These selection criteria probably bias the sample toward larger firms because the CRSP tape only includes firms listed on the New York or American Stock Exchange. However, this sample permits the analysis of the effect of calls on the price of the underlying bond and common stock. For the period from 1962 to 1978, there are 348 calls, most of which are by firms with stock traded over-the counter. After applying the selection criteria, the sample size is reduced to 102 calls, represented by 91 companies.

III. THE SURVEY

In order to find the firm's motives for bond refunding and calling, a questionnaire was sent to all the companies in the sample of 102 calls. This

questionnaire explicitly asks for the predominant motive for calls and why the company did not use open market repurchases to retire the bond. Fifty-six companies responded to the questionnaire. However, several companies did not have any information on the calls on file, especially if the event took place in the early 1960's. Therefore, the usable responses were reduced to 44 companies representing 52 call events. Some companies gave more than one motive for calling their bonds.

Table 1 lists the stated motives for bond refunding and calling. The major motives are summarized below, in order of frequency:

- 1) Refund or refinance using short-term debt to save interest costs (58%).
- 2) Eliminate restrictive covenants (15%).
- 3) Save trustee's fee because the outstanding amount of bond is small (13%).
- 4) Decrease the debt/equity ratio (6%)

Refunding and refinancing are by far the most popular motives for calls. Although the survey does not examine the probability of refundings, the fact that so many firms refund is consistent with the conclusion of Bowlin (1966) and Vu (1983) that bond refundings are profitable. It is interesting that 84 percent of public utility calls involve refunding or refinancing while only 20 percent of industrial and transportation firms refinance.

The motive of calls to eliminate restrictive covenants, revealed by the survey, can explain the phenomenon why firms call bonds whose market value is below the call price. In a study of financial contracting, Smith and Warner (1979) claim that the costs of complying with the restrictive covenants are substantial. In such cases, the firm must choose between complying with the burdensome covenants or to eliminate them. The easiest way to eliminate the covenants is to call the bond. The survey finds the following responses to the question why the firm did not use open market repurchases to retire the bond, in order of frequency.

- a) The use of open market repurchases is time consuming, costly, and sometimes difficult because the bonds are not readily available.
- b) The call is necessary because all the outstanding bonds must be redeemed in order to eliminate the restrictive covenants.
- c) The firm wishes to avoid any unfairness to those bondholders who might sell their bonds back to the company at a price below face value, not knowing that the bonds will soon be called at a much higher price.
- d) The indenture provision prohibits the use of open market repurchases.

Without knowing the motive of the call, one might reach a wrong conclusion that the firm is irrational in paying a premium above the market price to bondholders whereas the firm makes a correct decision in calling the bond when the redemption costs are smaller than the direct and opportunity costs of complying with the covenants.

The third major motive for calls is to save trustee's fee. When the redemption costs are less than the present value of all the future trustee's fees, it makes sense to call the bond even if the firm has to pay a premium above the market price.

Only 6% of firms in the survey indicate that they call bonds to change the debt/equity ratio. Although the result is qualitative, rather than quantitative, it shows that changes in the capital structure are not an important motive to most firms. This evidence is consistent with the claim of Modigliani and Miller (1958) and Miller (1977) that there is no optimal leverage for an

TABLE 1
STATED REASONS OF THE BOND CALLS

| Nonconvertible Bond | Maturity | Call Announce- ment Date | Bond Refund- ing | Stated Reasons of the Call |
|--|----------|-----------------------------------|------------------------|---|
| (1) | (2) | (3) | (4) | (5) |
| <u>PUBLIC UTILITIES</u> | | | | |
| 1. Consolidated Edison | 1989 | 10-03-62 | Yes | Refund to save interest costs. |
| 2. Columbia Gas System | 1984 | 01-14-63 | Yes | Refund to save interest costs. |
| 3. Central & South West | 1990 | 01-25-63 | Yes | Refund to save interest costs. |
| 4. Middle South Utilities | 1989 | 01-25-63 | Yes | Refund to save interest costs. |
| 5. Utah Power & Light | 1987 | 03-22-63 | Yes | Refund to save interest costs. |
| 6. Central & South West | 1989 | 04-05-63 | Yes | Refund to save interest costs. |
| 7. Wisconsin Electric Power | 1989 | 04-17-63 | Yes | Refund to save interest costs, and to increase funds for expansion purposes. |
| 8. Consolidated Edison | 1989 | 05-10-63 | Yes | Refund to save interest costs. |
| 9. Pacific Lighting | 1983 | 07-03-63 | Yes | Refund to save interest costs. |
| 10. General Public Utilities | 1990 | 09-06-63 | Yes | Refund to save interest costs. |
| 11. Wisconsin Public Service | 1989 | 10-04-63 | Yes | Refund to save interest costs. |
| 12. Puget Sound Water & Light | 1989 | 11-27-63 | Yes | Refund to save interest costs. |
| 13. Pacific Lighting | 1984 | 09-02-64 | Yes | Refund to save interest costs. |
| 14. Washington Water Power | 1990 | 01-29-65 | Yes | Refund to save interest costs. |
| 15. Iowa Electric Light & Power | 1992 | 03-23-72 | Yes | Eliminate restrictive covenants. |
| 16. Pioneer Natural Gas | 1977 | 02-07-73 | No | Save trustee's fee and administrative costs because the outstanding amount of bond is small. |
| 17. N. Y. State Electric & Gas | 1992 | 09-10-74 | No | Eliminate restrictive covenants. |
| 18. Laclede Gas | 1975 | 04-29-75 | No | Refinance using short-term debt to save interest costs. |
| 19. General Telephone & Electronics | 1976 | 02-27-76 | No | Refinance using short-term debt to save interest costs. |
| 20. Columbus & Southern Ohio Elec. | 1976 | 08-25-76 | Yes | Refund in anticipating an increase in market interest rates and to increase fund for expansion purposes. |
| 21. Southern Natural Resources | 1978 | 11-23-76 | No | Satisfy sinking fund requirement, and eliminate restrictive covenants. |
| 22. General Public Utilities | 1980 | 12-03-76 | No | Refinance using short-term debt and equity to adjust the capital structure. |
| 23. Wisconsin Electric Power | 2000 | 01-20-77 | No | Reduce excess cash holding, and take advantage of a special call price which is below the regular call price. |
| 24. Wisconsin Public Service | 2000 | 02-08-77 | Yes | Refund to save interest costs. |
| 25. Wisconsin Gas | 1990 | 02-09-77 | Yes | Refund to save interest costs. |
| 26. South Carolina Electric & Gas | 2000 | 03-16-77 | Yes | Refund to save interest costs. |
| 27. General Telephone & Electronics | 2000 | 04-12-77 | Yes | Refund to save interest costs. |
| 28. Mid-Continent Telephone | 2000 | 07-15-77 | No | Decrease the debt/equity ratio. |
| 29. Central Telephone & Utilities | 1995 | 07-22-77 | Yes | Refund to save interest costs. |
| 30. Sierra Pacific Power | 2000 | 08-19-77 | Yes | Refund to save interest costs. |
| 31. Piedmont Natural Gas | 1995 | 08-30-77 | Yes | Refund to save interest costs. |
| 32. American Natural Resources | 1995 | 11-22-77 | Yes | Refund to save interest costs. |
| <u>INDUSTRIAL AND TRANSPORTATION FIRMS</u> | | | | |
| 1. Homestake Mining | 1969 | 07-31-63 | No | Eliminate restrictive covenants, and save trustee's fee because the outstanding amount of bond is small. |
| 2. Ashland Oil & Refining | 1965 | 01-28-64 | No | Eliminate restrictive covenants, and save trustee's fee because the outstanding amount of bond is small. |
| 3. Pacific Petroleum | 1973 | 04-01-65 | No | Refinance using a lower-coupon note to save interest costs. |
| 4. Ling Temco Vought | 1978 | 06-01-67 | No | Satisfy merger or acquisition requirements. |
| 5. Foremost & McKesson | 1973 | 07-20-67 | No | Satisfy merger or acquisition requirements. |
| 6. American Tobacco | 1969 | 10-15-68 | No | Save trustee's fee because the outstanding amount of bond is small. |
| 7. Chicago & Eastern Ill. Railroad | 1985 | 06-09-69 | No | Free collateral or pledged property. |
| 8. Trans Union Corp. | 1973 | 03-15-62 | No | Save trustee's fee because the outstanding amount of bond is small. |
| 9. American Brands | 1977 | 07-10-74 | No | Save trustee's fee because the outstanding amount of bond is small. |
| 10. Raybestos Manhattan | 1975 | 01-14-75 | Yes | Refund in order to save interest costs. |
| 11. Union Oil of California | 1976 | 10-31-75 | No | Decrease the debt/equity ratio, and show lower liabilities at year end. |
| 12. May Department Stores | 1977 | 01-28-76 | No | Free collateral or pledged property. |
| 13. Rockwell International | 1977 | 08-27-76 | No | Refinance using commercial paper to save interest costs. |
| 14. Philips Industries | 1977 | 09-14-76 | No | Refinance using bank loan to save interest costs. |
| 15. Diamond Shamrock | 1978 | 10-29-76 | No | Eliminate restrictive covenants. |
| 16. Northwest Industries | 2000 | 01-19-76 | No | Eliminate the Security and Exchange Commission report requirement of a subsidiary. |
| 17. Seagram | 1978 | 05-10-77 | No | Reduce excess cash holding. |
| 18. Boeing | 1978 | 07-01-77 | No | Save trustee's fee because the outstanding amount of bond is small. |
| 19. International Tel. & Tel. | 1981 | 11-23-77 | No | Eliminate restrictive covenants. |
| 20. Standard Oil of Indiana | 1983 | 04-27-78 | No | Collapse a subsidiary. |

individual firm.

IV. CONCLUSION

This paper provides a direct answer on the individual firm's motives for calling and refunding. The most important motive is to save interest costs. The evidence also indicates that there are profitable opportunities to call or refund bonds trading at a discount. In such cases, the main motive is to eliminate restrictive covenants or trustee's fee. The three motives proposed by Johnson and Kleim (1978) turn out to be minor. It could be that the motives for calls and refunding are different from the motives for repurchases of discounted bonds.

The implications of the result of the survey are broad. First, knowing the motive for calls is important in evaluating the refunding process. For example, refunding to save interest costs is quite different from refunding to eliminate restrictive covenants because the latter may result in negative new present values. In the past, conflicting evidence has surfaced. Bowlin (1966) analyzes 40 refundings in 1962 and 1963 and concludes that all refundings are profitable. On the other hand, Sibley (1974) examines 56 refundings and finds that several of the refundings are clearly unfavorable because they result in negative net present values. Such conflict may disappear if the motives for refunding are taken into consideration.

Secondly, the result of the survey is important to the firm's bondholders. Because bondholders on average profit from the call, prospective investors are interested in a model that can predict which bonds in the market are most likely to be called. Knowing the firm's motive for call will improve the accuracy of the prediction.

Finally, the evidence in this paper is consistent with the finding of Vu (1983) in the study of straight debt calls that stockholders on average are not expropriated. Therefore, stockholders need not ask for more government regulations. In fact, stockholders will benefit if the redemption costs are less than the costs of complying with the restrictive covenants.

FOOTNOTE

1. Several financial institutions, such as Salomon Brothers, have already developed statistical models to predict which corporate bonds are most likely to be called.

REFERENCES

- J. Ang, "The Two Faces of Bond Refunding," Journal of Finance (June 1975), pp. 869-874.
- H. Bierman, "The Bond Refunding Decision," Financial Management (Summer 1972), pp. 27-29.
- O. Bowlin, "The Refunding Decision, Another Special Case in Capital Budgeting," Journal of Finance (March 1966), pp. 55-68.
- M. Brennan and E. Schwartz, "Convertible Bonds: Valuations and Optimal Strategies for Call and Conversion," Journal of Finance (December 1977), pp. 1699-1715.

- D. Emery and W. Lewellen, "Refunding Noncallable Debt,"; Journal of Financial and Quantitative Analysis (March 1984) pp. 73-82.
- R. Johnson and R. Klein, "Corporate Motives in Repurchases of Discounted Bonds,"; Financial Management (Summer 1978), pp. 14-18.
- M. Gordon, "A General Solution to the Buy or Lease Decision: A Pedagogical Note,"; Journal of Finance (March 1981), pp. 97-111.
- A. Kalotay, "On the Advanced Refunding of Discounted Debt,"; Financial Management (Summer 1978), pp. 14-18.
- W. Lewellen and D. Emery, "On the Matter of Parity Among Financial Obligations,"; Journal of Finance (March 1981), pp. 97-111.
- M. Livingston, "Bond Refunding Reconsidered: Comment,"; Journal of Finance (March 1980), pp. 349-353.
- T. Mayor and K. McCain, "Bond Refunding: One or Two Faces?"; Journal of Finance (March 1978), pp. 349-353.
- M. Miller, "Debt and Taxes,"; Journal of Finance (May 1977), pp. 261-275.
- F. Modigliani and M. Miller, "The Cost of Capital, Corporate Finance, and the Theory of Investment,"; American Economic Review (June 1958), pp. 261-297.
- A. Ofer, and R. Taggart, "Bond Refunding: A Clarifying Analysis,"; Journal of Finance (March 1977), pp. 21-30.
- K. Riener, "Financial Structure Effects of Bond Refunding,"; Financial Management (Summer 1980), pp. 18-23.
- A. Sibley, "Some Evidence on the Cash Flow Effects of Bond Refunding," Financial Management (Autumn 1974), pp. 50-53.
- C. Smith and J. Warner, "On Financial Contracting: An Analysis of Bond Covenants,"; Journal of Financial Economics (June 1979), pp. 117-161.
- J. Van Horne,; Financial Management and Policy, 3rd edition, (Englewood Cliffs, NJ: Prentice Hall, Inc., 1974).
- J. Vu, "An Examination of Corporate Nonconvertible Bond Calls and Their Impact on Security Prices," Unpublished Ph.D. dissertation (University of Chicago, Chicago, Illinois, 1983).
- J. Weston and E. Brigham,; Managerial Finance, 5th edition, (New York: Holt, Rinehart and Winston, Inc., 1975).