PRIME MINISTER

JUNK BONDS

Junk Bonds are, as you know, only one element in a rash of take-overs in the United States. Companies have issued debt to buy out shareholdings of unwelcome predators, in some cases leaving themselves very highly geared. They have taken over other companies to make themselves unattractive, and they have sold off bits of themselves to make predators lose interest, among other shenanigans.

The evidence on the effects of these activities is controversial. Some people argue that leveraged take-overs enable entrepreneurs and aggressive smaller companies to shake up the lethargic giants, including particularly the oil companies. It forces them to pay much closer attention to their growth and earnings.

The argument against this is that managements often behave in a way which helps them to keep their jobs, but does nothing for their shareholders. Certainly some companies have been substantially weakened by their efforts at self defence (e.g. Disney Corporation) and generally the industrial sector as a whole becomes more highly geared.

Company law and the take-over rules in the United Kingdom act as a brake on frenetic take-over activity. But this is clearly an area which needs to be watched.

David Norgrove

22 November 1985

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21 November 1985

PRIME MINISTER

Recently you asked for information on Junk Bonds. I enclose a paper from the Bank of England, and also a speech by the Chief Executive Officer of Drexel Burnham Lambert, the major issuer of Junk Bonds (more politely "High Yield Bonds") in the United States.

BG.

BRIAN GRIFFITHS

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FROM: MRS C M ALDRED

NOTE FOR RECORD

Copies to Mr Loehnis, Mr Walker, Mr Flemming, Mr Farrow, Mr Holland, Mr Anderson, Mr Hewitt, Mr Lomax, Mr Price, Mr Taylor, Mr Beverly, Mr R M G Brown, Mr Foot, Mr D W Green, Mr Hayden, Mr Marr, Mr Raikes, Mr Shilson, IFD, BSD Group 6, Group II

US: "JUNK BONDS"

1 This note attempts to put together what we know about junk bonds, otherwise called high-yield securities. The issue is topical not only because of the apparent recent increase in investor interest in such securities but also because of (i) the implications for the troubled US thrift industry of its investment in such securities, (ii) the increased use of junk bonds to finance takeovers, and particularly hostile takeover bids, and (iii) reports that the leading underwriter of junk bonds in the US, Drexel Burnham Lambert (DBL), is considering underwriting issues for UK companies.

What junk bonds are

2 Junk bonds is the term given to US corporate bonds which are rated at below investment grade by the major US rating agencies, that is at Ba or lower by Moody's and BB or lower by Standard and Poor's. Recently, the junk bond market has grown significantly in relation to the total corporate bond market. There are now reportedly some $100 bn of junk bonds outstanding, equivalent to more than 18% of the total stock of US corporate bonds, compared to an equivalent figure of only 5% in 1981. Nevertheless, reflecting the dominance of the larger investment - grade bond market by a small number of relatively large blue chip bond issuers, DBL estimates that as high a proportion as 85% of US corporations are now rated at below investment grade (though it is far from clear that all 85% here have agency ratings or are even active bond issuers).

3 The significance of an investment-grade rating is that US law and regulation forbid certain entities, particularly trusts and federally-chartered banks and thrifts, from investing in corporate bonds of lower than investment grade. These restrictions, of course, reduce the size of the market of potential purchasers of junk bonds.

The issuers

4 Traditionally, issuers of junk bonds have been established corporations whose debt has been downgraded from investment-grade level rather than companies making their first excursions into the credit markets. Since the late 1970s, however, some 350 untested companies, whose borrowing had previously been restricted to private sources, have allegedly sold over $30 bn of junk bonds rated at below investment grade from the outset. This probably accounts for a large part of the recent growth in the junk bond market. According to DBL, last year there were 122 new issues of junk bonds totalling $14.3 bn, a considerably larger number and amount than the previous year's 87 and $7.3 bn. Shad, SEC Chairman, has put last year's figure at over $15 bn, compared to only $2 bn in 1981. Unfortunately we do not have an analysis of junk bond issuers by sector or data on the extent of the oil sector's dependence on such instruments.

5 Recently, junk bond issues have been increasingly arranged to finance corporate takeover bids, that is, institutional investors have committed themselves to buy the bonds if the bid is successful. This technique enables a relatively small company to raise funds to bid for a relatively large company by borrowing against the assets of the company to be acquired, but if the bid is successful it leaves the merged company highly geared. Congressional staff estimated earlier this year that there were more than $14 bn of junk bond issues arranged to finance a total of 7 takeovers alone (of CBS, Unocal, Uniroyal, Crown Zellerbach, Hilton Hotels, American Natural Resources and National Can). However, to date, a number of junk-bond-financed takeover bids have been unsuccessful and the bonds have not been issued, viz the recent failure of Mesa's bid for Unocal.

But the arbitrageurs and others can still make a killing.

How they perform

6 Junk bonds - known as "high-yield securities" in polite Wall Street circles - tend to carry higher yields than investment-grade corporate bonds; typically, the differential is of some 3-5 percentage points. This is not surprising given both that their lower rating implies that they are viewed as relatively risky investments and the restricted market of potential purchasers. A study by the Wharton School of Economics found that between 1980 and mid-1984 the average annual rate of return on junk bonds was 13.5%, almost double the 7.2% return for AAA-rated bonds (ie the top class of investment-grade bonds). Other studies reportedly have reached similar conclusions.

7 The differential between returns on junk and investment-grade bonds has widened since 1982 as the chart (on the dustbin!) overleaf shows. The figures overleaf show how the differential widened substantially in the final quarter of last year, allegedly reflecting a high level of new issues of junk bonds at that time. So far this year, however, the differential has narrowed, by almost 150 basis points from the end-1984 peak, presumably at least partly reflecting an increase in the popularity of such securities amongst investors (see paragraphs 8 and 9). At the same time, the average yield on BB-rated long-term bonds with a 9% coupon has fallen to 12.9% from 14.8% at end-1984.

8 Advocates of investment in junk bonds emphasise the, perhaps surprisingly, low default rate attached to them. According to DBL, to date defaults on "original-issue junk" (ie bonds rated at below investment grade from the moment of issue?) have produced losses of only 0.52% pa. An independent study by Professor Edward Altman found that between 1974 and 1984, the default rate (as measured by dollar volume) on junk bonds was 1.5%, comparing perhaps not too unfavourably with 0.8%? 0.5%?* for investment-grade corporate bonds and a Wharton study came to a similar figure for junk bonds. (The other side of the coin is, of course, that the performance of investment-grade corporate bonds may have been below expectations.) Altman also found that,

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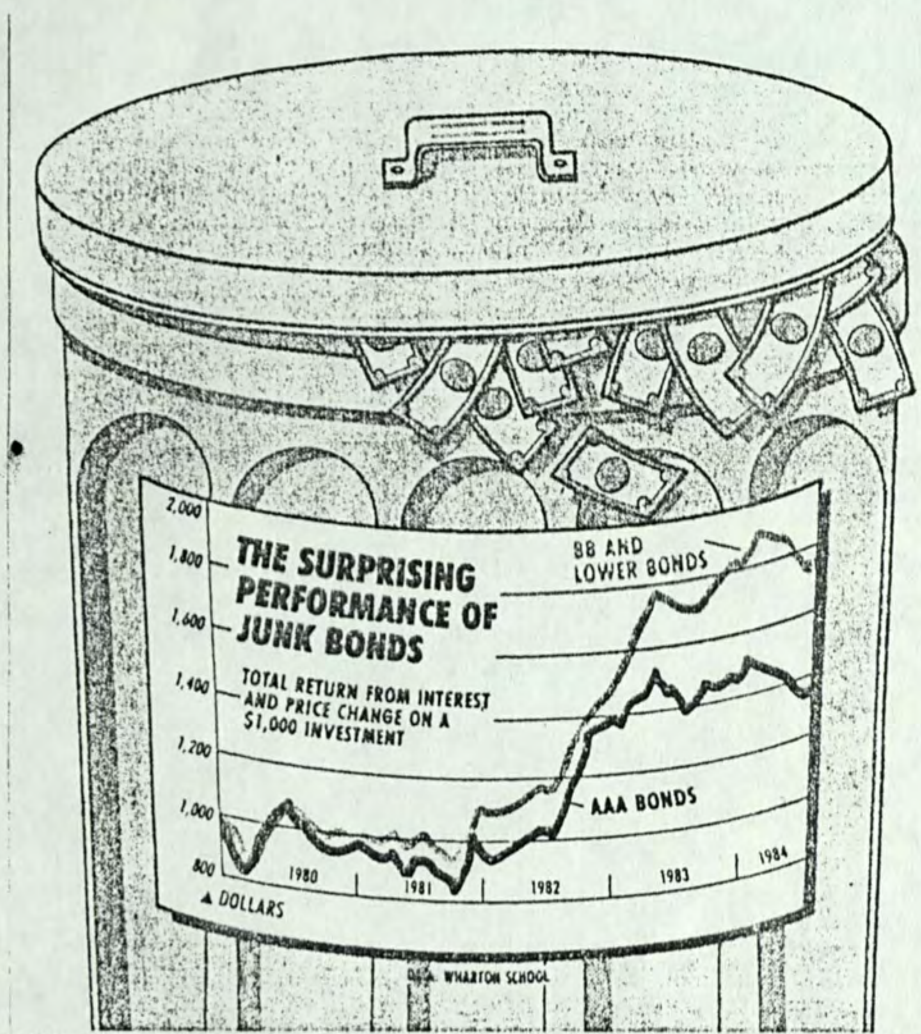
*The account in "International Businessweek" is unclear but we expect to receive a copy of Altman's report shortly.



Differentials between average yields on AA and BB-rated seasoned industrial long-term bonds with a 9% coupon (basis points)

1984	26 Jul	180	1985	31 Jan	201
	30 Aug	170		28 Feb	120
	27 Sep	216		28 Mar	107
	25 Oct	252		25 Apr	125
	29 Nov	254		16 May	138
	27 Dec	280			

Source: Salomon Bros Inc's "Bond Market Roundup"

even allowing for losses due to defaults, junk bonds outperformed US Treasuries by an annual average of between 490 and 580 basis points between 1978 and 1983.

The investors in junk bonds

9 Pension funds, insurance companies, state-chartered thrifts, mutual funds, unit trusts and individuals are major investors in junk bonds. The apparent recent increase in investor interest in junk bonds may perhaps be explained by a growing market awareness that their relatively high yield combined with a still low default rate has meant that, to date at least, junk bonds have tended to outperform most other financial investments. Certainly, the financial press has been giving these facts greater airing recently.

10 Because junk bonds are usually issued in units of $25,000 or more, small individual investors generally invest indirectly in junk bonds through mutual funds and unit investment trusts which specialise (albeit generally not exclusively) in junk bonds. There are reportedly nearly 40 such mutual funds. This indirect form of investment enables individuals to invest a smaller amount (as little as $1,000) and acquire an interest in a more diverse portfolio. Like the underlying bonds, junk bond mutual funds have tended to yield relatively high returns. According to Lipper Analytical Services, between 1974 and 1984 junk bond mutual funds gained 214% in value and A-rated bond mutual funds only 148%. However the difference appears to have been substantially reduced more recently, the equivalent figures for the 1979-84 period being 79% and 73% respectively; last year the value of A-rated bond funds rose more than junk bond funds.

The risks

11 Junk bonds are not only high-yield but also high-risk securities. By definition they are viewed as more speculative investments than blue chip corporate bonds, whatever the actual return realised on junk bonds in the past. Although a junk bond investment portfolio can be spread over a wide range of industries, it is possible to envisage credit risks to the

portfolio as a whole if, for example, recession and/or a hike in interest rates seriously impeded the borrowers' debt-servicing ability. The risks seem likely to be greater with respect to low-rated rather than high-rated borrowers.

12 The economic environment of slower growth and a possible small rise in interest rates which some forecast for this year and next may well make junk bonds riskier investments than in the recent past. As it is, already in 1984 losses to investors on account of bankruptcies were more than double losses over the entire 1976-83 period, according to DBL. Moreover, this year has seen the largest ever junk bond default when Sharon Steel Corp failed to make interest payments on $426 mn of CCC-rated bonds.

13 These risks are particularly great for corporations which have borrowed, whether through junk bonds or other means, to finance corporate acquisitions and have in consequence become highly geared. The issue of junk bonds to finance takeovers is a form of leveraged buyout with most, if not all, of the attractions and potential pitfalls of such a technique (see pages 2-4 of my note of 16 July 1984, copy attached). Robert Lindley, IFU, is writing a paper on recent trends in US takeovers and mergers.

14 Another serious concern is that some state-chartered thrifts have invested in junk bonds in an attempt to reduce the interest rate mismatch between their low-yielding mortgage assets and their high-cost deposits. (States such as California and Texas allow state-chartered thrifts broad scope to invest in junk bonds). The FHLBB has estimated that the thrift industry as a whole has some $3-5 bn of junk bond investments, although only a few thrifts are thought to have invested heavily in them. Indeed, such is the concentration of the thrift industry's junk bond investments that one thrift is reported to hold $2 bn of such securities (see Mr Foot's note of 15. 5.85). The worry is not only that thrifts lack the experience and expertise to manage such investments but also that any problems which may arise could exacerbate thrifts' other, more widespread, problems.

The regulators' and legislators' reaction

15 The SEC Chairman, John Shad, who publicly warned about the potential dangers of leveraged buyouts early last year (see page 3 of the attached note) recently extended this warning to junk bonds generally. "High yield bonds are of very low quality. The corporate issuers are highly leveraged. Their fixed charge coverages are paper thin. ...Even a mild recession will have very serious repercussions for some of these companies .... One can no longer take confidence in the fact that the favourable experience to date will persist indefinitely. As confidence builds, the tendency is to overdo a good thing. Excesses inevitably lead to a day of reckoning".

16 In recent testimony to a Congressional Sub-Committee, the Fed Vice-Chairman Preston Martin noted that debt-financed takeovers exposed the financial system to greater risks and then turned to the question of junk bonds in particular. "The large investors who purchase most of these bonds are relatively sophisticated and should be aware of the risks involved. But it would be fair to say that one cannot really be entirely comfortable about such assumptions, especially when the market has not been tested by some signifciant negative surprises - which inevitably will come at some point." On thrifts' purchases of junk bonds, he added that "given the evident sensitivity of financial markets to the fortunes of individual banks and thrift institutions, I think it is incumbent upon supervisors at both the federal and state levels to keep a close eye on developments in this area." Martin also expressed his personal view that all federally-insured banks and thrifts should be barred from purchasing junk bonds, other than those issued by start-up companies.

17 The FHLBB is considering restricting junk bond investments by state-chartered, federally-insured thrifts, thereby extending such restrictions to most state-chartered thrifts. A FHLBB official wrote recently that "the incentive for risk taking by savings institutions with low capital and government insured liabilities is of tremendous concern to us". He added, however, that given the actual past record of losses on junk bonds, which corresponds closely to the loss record on money-centre banks' commercial

loans, "precluding the holding of high-yield bonds by savings institutions on the grounds of "safety and soundness" could be deemed arbitrary, in the absence of data to substantiate the assertion of excessive risk".

18 Corrigan, FRBNY President, recently expressed concern that the availability of junk bond financing might lead to excessive borrowing in the US economy. "Junk bonds may be providing credit market access and/or financing terms to individual borrowers or classes of borrowers who might otherwise be rationed out of the market or at the very least might be required to pay a higher risk premium. Enhanced access to markets for such economic agents can, of course, be beneficial to them and to the economy more generally. However, the end result of this may be a situation in which the economy as a whole is simply taking on too much debt relative to its equity base and to its income-producing capabilities." This worry takes on particular significance against the background of the general gearing up of the US corporate sector in recent years.

19 Worries that some corporations are becoming excessively highly geared and that the use of junk bonds to finance hostile takeovers is an inefficient use of capital, prompted Congressmen, led by the Republican Chairman of the Senate Budget Committee, Peter Domenici, earlier this month to introduce legislation imposing a moratorium on takeovers thus financed until the end of the year.

Conclusions

20 The evidence suggests that, to date, junk bonds have tended to yield higher returns than many other types of investment, despite their greater riskiness. Immediate economic prospects combined with the recent increase in corporate leveraging generally in the US suggest, however, that this trend may not continue. This may be particularly true with respect to recent and pending issues of junk bonds to finance corporate takeovers, which tend to leave the borrowing companies particularly highly geared and vulnerable to debt-servicing difficulties if demand and cashflow are below expectations and/or if interest rates rise

sharply. Another particular concern is that existing junk bond investments by a small number of state-chartered thrifts may turn sour and exacerbate the more widespread problems of the thrift industry. However, all federally-chartered depository institutions are barred from such investments. The financial regulators, and Congress, appear to be aware of the potential problems and are considering some damage-limiting action.

International Division
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21 May 1985

Mrs C M Aldred (4386)

The Case For High Yield Bonds

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The heated rhetoric generated by recent hostile takeover attempts has linked high yield bonds (pejoratively dubbed "junk bonds") with a number of unrelated issues such as the fraudulent activities at ESM, the financial problems of thrift institutions, bad commercial lending by certain large U.S. banks, foreign loans, the overleveraging of America, practices of corporate predators and greenmail. This loaded language does nothing to clarify the facts.

Problems exist in the financial markets, demonstrated by the thrift's recurring difficulties and the bankruptcies of government securities dealers. However, these difficulties are totally unrelated to high yield bonds. As far as we know, none of the Ohio or Maryland S&L's that encountered difficulties owned any high yield bonds. There is no substantiated evidence of abuse in the high yield bond market.

High Yield Bonds Are Not Junk:

Newly issued public high yield bonds provide companies rated below investment grade with access to public capital markets.

It is critical to understand that only 675 of the 20,000 companies in the United States with assets in excess of $25 million have been rated investment grade by the major rating agencies, Moody's and Standard & Poor's. These agencies rely heavily on historic data and size, which are not necessarily valid indicators of future capability to service debt. High yield bonds typically are issued by midsized growth companies unable to attract an investment grade rating, often simply because they lack the requirements of history or size. (Thus,) high yield bonds effectively replace the private term loans traditionally made by insurance companies. Investors are protected from changing circumstances by market liquidity instead of the less efficient mechanisms of restrictive covenants found in private placement agreements.

A Growing Market:

The newly issued high yield bond market began to evolve in 1977 when approximately $900 million of bonds were issued by midsized and growing companies. The market has grown fairly steadily, reaching $14 billion of new issues in 1984. Over 350 companies have used the public market to issue $35 billion of high yield debt since 1977. Many of these companies, such as Humana Inc., MCI Communications, Coastal Corporation, Beverly Enterprises, People's Express and Kinder-Care have recorded impressive results and have

enhanced the growth of our nation's economy. Far more jobs are being created by small and midsized companies than by the relatively few larger companies. In fact, Fortune 500 companies have seen net losses of jobs in recent years.

Measuring Performance:

Institutional investors who buy corporate bonds are essentially risk-adverse. This has led to a somewhat inefficient market which pays investors premiums for accepting incremental risk. It has been proven empirically that these premiums are well in excess of the actual increase in risk and, with premium returns averaging 4 to 8 times the actual increase in risk, high yield bonds have been an unusually successful investment vehicle. In fact, more money has been lost in the bond markets through the downgrading of investment grade debt than through defaults of below investment grade issues.

Confirmation of high yield performance is available in a number of academic studies. An analysis by the Wharton School of the University of Pennsylvania of investment return for the period of January 1980 to June 1984 found that below investment grade bonds produced a total return of 13.5 percent a year, almost double the 7.2 percent return for AAA corporate bonds. The Wharton study concludes that, "In the context of a well-diversified portolio, the risk of lower-quality bonds was no greater than the risk of high-quality bonds."

Furthermore, defaults have been below expectations. A New York University study found that from 1974 to 1984, although the default rate on high yield bonds is higher than for all corporate bonds, the actual

losses were only about one percent because the defaulted bonds retained about 41 percent of their par value. The New York University study concluded that even including losses from defaults, the high yield sector outperformed Treasuries by an annual average of 490 to 580 basis points from 1978 to 1983.

As with any quality of bond, investors should diversify portfolios of high yield bonds, as do the investment professionals who dominate this market. The individual investor should participate only through professionally managed vehicles, such as mutual funds or unit trusts.

High Yield Debt in Acquisitions:

Despite the press attention high yield bonds have attracted, they have not been a major source of funding for mergers and acquisitions. Of the $122 billion used to finance mergers and acquisitions in 1984, less than 2 percent came from high yield bonds. Most of these activities were financed by cash, bank borrowings or internally generated cash flow. Commitments to fund attempted takeovers with high yield bonds have been greater this year, but have actually been exercised only in the highly regarded hostile-turned friendly acquisition of American Natural Resources by Coastal Corp. Understandably, some managements of large companies, previously impregnable to challenge because of sheer size alone, view with alarm the ability of smaller companies to mount takeover bids backed by public debts. However, the discipline imposed on these managements by this potential competition is certainly a positive development.

There have also been claims that high yield bonds structured for use in recent takeovers are of low quality, thereby discrediting historic default ratios as a measure of future security. However, no knowledgeable credit analyst who has reviewed these securities would agree with that assertion. On the contrary, because of the hostile environment and the speed with which such financings must be arranged, these issues have been of higher credit quality than other issues providing comparable returns. They have been carefully structured to provide significant protection to the institutional purchasers.

Unfriendly Acquisitions:

While reasonable people may differ on the merits of hostile takeovers, there is certainly significant evidence that such free market activities benefit the economy as a whole. In his study, "Takeovers: folklore and science," published in the Harvard Business Review, Professor Michael Jensen found that "scientific evidence indicates that activities in the market for corporate control almost uniformly increase efficiency and shareholders' wealth."

A similar conclusion was drawn by President Reagan's Council of Economic Advisers. In a section of the 1985 report entitled "The Market for Corporate Control," the CEA concludes that competition plays a central role in the evolution of the economy. "(It) breaks down entrenched market positions, unsettles comfortable managerial lives and provides incentives for innovative forms of business organization and finance."

An argument against takeovers is that the successful bidder must

sell off assets to pay the acquisition debt or that the corporation which mounts a successful defense does so by leveraging itself. This restructuring, particularly in the case of the oil industry, is caused by real economic forces independent of takeovers, although timing and the particular measures adopted have been influenced by takeover activity. ARCO recently adopted a restructuring program which will ultimately produce a higher dividend, fewer shares outstanding and higher earnings per share. Exxon is continuing its efforts to improve the return on shareholder equity. The company has repurchased some 96 million shares, or 11 percent of its previous common share capitalization. However, this program has not precluded a high level of capital expenditures. In fact, the company has budgeted capital and exploration expenditures for 1985 at $10.5 billion versus $9.8 billion in 1984.

Whether the restructuring of the oil industry bodes well for our economy, time will tell. We do know that no pressure was brought to bear on managements in the steel industry 15 years ago. They did not restructure their companies and the nation is faced today with the results of their failure to act. Perhaps it is time to try another approach.

Another criticism of hostile takeovers is that they limit long-term economic growth and curtail corporate expenditures for research and development. An extensive study by economists at the Securities and Exchange Commission found that this theory is not supported by empirical evidence. The data strongly suggests that investment in long-term projects does not increase vulnerability to a takeover. The 57 target

firms who experienced hostile tender offers had an average R&D to sales ratio of 0.77 percent, which was less than one-half that of their industry peers.

Another unsubstantiated red herring focuses on the role federally insured thrifts play as a purported major source of capital to finance takeovers. This position stems from the mistaken belief that savings & loans have been major participants in takeover financings. On the contrary, of the three major financings recently arranged, thrifts represented a de minimus amount of the total commitments and those few participants have typically been knowledgeable high yield bond professionals.

Participation of Thrifts in the High Yield Market:

Thrifts have been relatively small participants in the newly issued high yield bond market. We estimate they hold between $3 to 5 billion of these securities. The Garn-St. Germain bill wisely authorizes such investments by thrifts to allow them to improve their risk adjusted returns toward levels necessary to ensure their long term viability. Clearly, such investments should be made prudently, subject to professional credit analysis within the thrift or retained by them on a pooled basis. Diversification, which is critical to the success of such an investment program, should be required, if not voluntarily pursued. Based on all available historic and current data, these investments will continue to provide above average risk-adjusted returns to thrifts, in addition to the liquidity absent in mortgages and commercial loans.

Decline in Takeover Activity:

The recent Delaware court decision which allows Unocal to discriminate against its largest shareholder, provides extraordinary protection to management and will sharply reduce takeover activity. Blatant abuses in the takeover arena such as greenmail and poison pills may well lose their effectiveness through the self-correcting nature of the free market system.

In specific cases legislation may make sense to insure that both the aggressor and target company have a fair opportunity to act responsibly. For example the ten day notification requirement under rule 13D creates opportunities for abuse and should be addressed.

Corporate takeover activity is a matter that deserves careful discussion, analysis and deliberation. Loaded words and dramatic rhetoric only cloud the discussion and make it more difficult to deal with these complex market events.

High yield bonds are not the cause of takeovers, nor are they the primary source of capital used to finance them. They are the financial instruments used to provide midsized growth companies with access to the public market for capital and as such, they are an integral part of our nation's economic fabric. High yield bonds have made a substantial contribution to our economic vitality and ability to compete globally.