

Innovation and Regulatory Restraints in The Corporate Bond Market

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Over the last decade, a number of innovations were introduced which improved the efficiency of financial markets. Several of these made it possible for smaller or recently-launched enterprises to gain access to the public capital markets. Others enhanced the capacity of major companies and institutional investors to diversify the risks inherent in holding large portfolios of marketable securities. These innovations were typified by the emergence and growth of the market for high yield corporate bonds.

However, a number of steps have been taken by Congress and Federal regulatory agencies in the last year or so to limit the ability of market participants to use some of the recently adopted innovations. These include constraints on the ability of savings and loan associations (S & L's) to invest in high yield bonds and pressure on commercial banks to limit financing of highly leveraged transactions (HLT's).

The net results of these unwise regulatory restraints would include a reduction in the availability—and an increase in the cost—of credit to borrowers which do not have the best credit ratings. There would also be a cutback in the ability of portfolio managers to diversify risk without corresponding gains to the public at large.

Growth of High Yield Corporate Bond Market

The emergence of the market for high yield corporate bonds was a major innovation of the 1980's. This market—which consists mainly of a handful of investment banking firms linked to a roster of large institutional investors—has made it possible for hundreds of firms with low credit ratings to obtain funds to finance the expansion of output and employment.

By formal definition, high yield corporate bonds are those assigned ratings below investment grade by either Moody's Investors Service (below Baa 3) or Standard & Poor's (below BBB-). In colloquial terms, such securities are referred to as "junk bonds." These issues are also described as high yield if they yield market returns substantially above those on U.S. Treasury bonds of comparable maturity (at least 3.5 percentage points on 10-year obligations). As of March 26, 1990, the yield spread over U.S. Treasuries was 6.53 per cent. (See Table 1 attached.)

It is estimated that, at the end of 1988, there were 23,000 firms in the United States with \$35 million or more in receipts. Of that number, 1,800 (5.1 per cent) had raised funds in the public debt market. Roughly 800 of these borrowers entered the market on the basis of investment grade credit ratings. The remaining 1,000 had to rely on the high yield segment of the market to raise funds. Moreover, Drexel Burnham Lambert (DBL)—the investment banking firm most responsible for the development of the high yield market—has estimated that about 95 per cent of the remaining 21,000 companies would be classed as non-investment grade if they were to issue bonds in the public market.

The expansion of the high yield corporate bond market can be traced in Table 2. It will be noted that \$204.4 billion of high yield obligations were outstanding at the end of 1989. It is estimated that this figure represented 21 per cent of the total amount of corporate bonds outstanding. The market mushroomed after 1981—climbing from outstandings of \$31.6 billion at the end of that year to \$204.4 billion at the end of last year. These figures represented an average annual growth rate of 26 per cent.

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TABLE 1
Bond Yield Comparisons (10-year Maturities. Per Cent)

Category	March 26, 1990	52-Week Record	
		High	Low
U.S. Treasury Bonds	8.70	9.41	7.99
Corporate Bonds			
High Quality	9.66	10.21	9.05
Medium Quality	10.13	10.61	9.56
High Yield	15.23	15.38	13.10
Yield Differentials (Less U.S. Treasury Bonds)			
Corporate Bonds			
High Quality	0.96	0.80	1.06
Medium Quality	1.43	1.20	1.57
High Yield	6.53	5.97	5.11

Note: Corporate Bonds Ratings: High Quality, Aaa-Aa. Medium Quality, A-BBB/Baa. High yield BB/Ba-C.
Source: Prepared by Brimmer & Company, Inc. Data from Merrill Lynch Bond Indexes.

The demand for high yield corporate bonds has come primarily from financial institutions. In 1988, mutual funds and insurance companies each owned 30 per cent of the \$183 billion of high yield bonds then outstanding. (Table 3) They were followed by pension funds (15 per cent), foreign investors (9 per cent), savings and loan associations (7 per cent), individuals (5 per cent), corporations (3 per cent), and securities dealers (1 per cent).

The bulk of the proceeds from the sale of high yield bonds has been used to finance acquisitions and corporate takeover activities. For instance, as shown in Table 5, just under one-fifth of funds raised

TABLE 2
Growth of the High Yield Corporate Bond Market, 1977-1989 (Amounts in Billions of Dollars)

Year	Bond Issuance		Value of Bonds Outstanding (Year End)	
	Amount	Per Cent Change	Amount	Per Cent Change
1977	1.06	—	24.00	—
1978	2.13	100.0	26.12	8.9
1979	1.69	-20.7	27.82	6.5
1980	2.06	21.9	29.88	7.4
1981	1.74	-15.9	31.62	5.8
1982	3.18	82.8	34.80	10.1
1983	8.49	167.0	43.29	24.4
1984	15.78	85.9	59.07	36.5
1985	19.80	25.5	81.97	38.8
1986	45.60	130.0	124.97	52.5
1987	35.80	-21.5	158.97	27.2
1988	37.10	3.6	182.97	15.1
1989	25.30	-31.8	204.37	11.7

Source: Calculations by Brimmer & Company, Inc. Data from Drexel Burnham Lambert.

TABLE 3
Ownership of High Yield Bonds Year-End, 1988

Category	Per Cent of Amount Outstanding
Mutual Funds, Money Managers	30
Insurance Companies	30
Pension Funds	15
Foreign Investors	9
Savings and Loans	7
Individuals	5
Corporations	3
Securities Dealers	1
TOTAL	100

Source: Prepared by Brimmer & Company, Inc. Data from Drexel Burnham Lambert and U.S. General Accounting Office.

in 1988 went to finance the growth and general refinancing of existing firms. The financing of non-hostile acquisitions accounted for just under one-third of the proceeds. The remaining 50 per cent was used to finance corporate takeover activity: defensive recapitalizations (11 per cent), leverage buyouts (12 per cent), and repayment of LBO debt (28 per cent).

Key Role of Drexel Burnham

The growth of the high yield bond market was stimulated by the activities of Drexel Burnham Lambert. This firm—before it filed for bankruptcy protection on February 13, 1990—introduced the vast majority of the new types of securities and trading practices which became the foundation of the high yield market. Drexel underwrote a major fraction of the new flotations. (Table 4.) It also made a market in such issues by standing ready to quote prices on a wide range of outstanding issues.

Drexel's rise to dominance in the high yield market was based on a radical change in the use it made of bond proceeds: in 1983, it began employing such bonds to assist clients in financing hostile corporate takeovers. About this time, merger and acquisition activities accelerated dramatically, and

TABLE 4
Major Underwriters of High Yield Corporate Bond, 1989 (Amounts in Billions of Dollars)

Underwriting Firm	Amount	Per Cent of Total
1. Drexel Burnham Lambert	9.7	38.3
2. Shearson Lehman Hutton	2.4	9.5
3. Morgan Stanley	2.3	9.5
4. Merrill Lynch	2.3	9.1
5. Goldman, Sachs	2.2	8.7
6. First Boston	2.0	7.9
7. Salomon Brothers	1.5	5.9
8. Donaldson, Lufkin & Jenrette	1.3	5.1
9. Bear, Stearns	0.5	2.0
10. Kidder, Peabody	0.4	1.6
11. Other Firms	0.7	2.8
Total	25.3	100.0

Source: Calculations by Brimmer & Company, Inc. Data from Securities Data.

TABLE 5

High Yield Bond Financing: Use of Proceeds, 1987 and 1988 (Amounts in Millions of Dollars)

Category	1987		1988	
	Amount	Per Cent of Total	Amount	Per Cent of Total
Financing of Existing Firm				
Internal Growth	2,572	7.5	615	1.7
General Refinancing	4,477	13.1	5,481	15.5
Troubled Recapitalization	500	1.5	513	1.5
Sub-Total	7,549	22.0	6,609	18.7
Financing of Acquisitions				
Defined Acquisitions	1,905	5.6	3,805	10.8
Future Acquisitions	666	1.9	1,000	2.8
Repayment of Acq. Debt	6,074	17.7	6,170	17.5
Sub-Total	8,645	25.2	10,975	31.1
Financing of Corporate Takeover Activity				
Recapitalization	3,792	11.1	3,759	10.7
Leveraged Buyout (LBO)	6,708	19.6	4,134	11.7
Repay LBO Debt	7,597	22.2	9,781	27.7
Sub-Total	18,097	52.8	17,674	50.1
Total Proceeds	34,291	100.0	35,258	100.0

Source: Calculations by Brimmer & Company, Inc. Data from Drexel Burnham Lambert.

DBL rode the wave to enormous financial success. Controlling the bulk of the new high yield issues, it generated revenues of more than \$1.0 billion in 1983. By 1986, Drexel had earnings of \$545 million on revenues in excess of \$4.0 billion.

But it was also in 1986 that Drexel was caught in a tightening web of criminal charges involving insider-trading and other securities fraud which swept through Wall Street. The key figures caught in the web were Dennis B. Levine (a Drexel banker), Ivan F. Boesky (a leading arbitrager and Drexel client), and Michael R. Milken (head of Drexel's high yield bond department). In September, 1988, the Securities and Exchange Commission (SEC) filed a civil complaint accusing Drexel and Milken of inside-trading, stock manipulation, and aiding tax law violations. In December, 1988, Drexel agreed to plead guilty to six criminal counts of mail and securities fraud which the SEC intended to file. The settlement also required Drexel to dismiss Milken and to pay \$160 million in fines. Drexel and the SEC settled the charges in April, 1989.

In May, 1989, Drexel and Merrill Lynch completed the underwriting of \$4.0 billion of securities for RJR Holdings to help finance the buyout of RJR Nabisco by Kohlberg Kravis, Roberts—the leading LBO firm in the country. The high yield issues represented the largest-ever underwriting of corporate debt.

The RJR Nabisco issue had a dramatically negative impact on the high yield market. It drove down prices and raised yields on other RJR bonds outstanding. The price erosion quickly spread to other low-rated high yield bonds. Through the summer and into the fall, turmoil prevailed in the high yield market. In October, as volatility increased, more than \$1.2 billion of planned issues had to be postponed. Drexel announced that it was unable to raise \$75.0 million for an LBO—despite the fact that it had given the prospective borrower a “highly confident” letter. The high yield market got another shock in January, 1990, when two key retailing units of the Campeau Corporation went into bankruptcy. The Campeau acquisitions had been financed substantially by high yield bonds.

Finally, on February 5, 1990, Drexel reported that it had lost \$40.0 million on revenues of \$4.1

billion in 1989. Partly in response to this announcement, Drexel found its own funding sources drying up rapidly. During the period February 8–12, it sought vainly to borrow \$500 million from a group of commercial banks on which it had relied for many years. At the same time, the continuing sharp decline in high yield bond prices greatly eroded the value of its investment portfolio. By February 13, it had practically exhausted its cash reserves, and it defaulted on a \$100 million loan. On the same day, it filed for Chapter 11 bankruptcy protection.

Regulatory Restraints on the High Yield Bond Market

As indicated above, a number of changes have been made in regulatory guidelines which will have a seriously adverse effect on the high yield bond market. Moreover, several bills have been introduced in the Congress which—if adopted—would have even more negative consequences for those who rely on that segment of the market as an investment outlet or as a source of funds to finance capital formation.

In general, in early 1989, Federal bank regulators took steps to extend the limitations that had already been imposed on the ability of financial institutions under their supervision to acquire and hold bonds with ratings below investment grade (typically Baa), but a few variations were also introduced. Almost without exception, Congressional sponsors of legislation that would negatively affect high yield bonds have been concerned over the use of proceeds from the sale of such securities to finance mergers and acquisitions—especially hostile takeovers. In the S & L rescue legislation adopted last year, the ability of these institutions to hold high yield bonds was severely restrained. State supervisors of insurance companies and Federal officials charged with guaranteeing the safety of corporate pension fund benefits have expressed similar worries.

Restraints on Commercial Banks

Commercial banks either chartered or insured by the Federal Government have always faced limitations on the amount of corporate debt securities they could hold. In the case of national banks, such bonds must be of investment grade, and they must not be of a predominantly speculative nature. Specifically, corporate debt securities which have been assigned ratings below investment grade by any of the major rating agencies are classified as speculative by the Comptroller of the Currency (OCC). Consequently, they cannot be acquired or held by national banks. The same classification is applied to bonds issued to finance corporate takeovers. Because of these guidelines, which were strengthened a year ago, high yield corporate bonds cannot be purchased by national banks.

In addition, member banks of the Federal Reserve System are subject to similarly restrictive guidelines. The Chairman of the Federal Reserve Board, on numerous occasions, has expressed concern over the high levels of debt assumed in the American economy—especially by industrial corporations. Reflecting that concern, Federal Reserve Bank examiners, in early 1989, were told to give special attention to commercial bank loans provided to finance leverage buyouts (LBO's). While no specific quantitative guideline has been set, banks have been encouraged to exercise restraint in this line of lending activity. For money center banks as a whole, LBO loans represent approximately 10 per cent of their outstanding commercial and industrial loans. Informal comments by Federal Reserve officials suggest that the System would not like to see a doubling of that ratio.

State-chartered banks that are not members of the Federal Reserve System—but which are insured by the Federal Deposit Insurance Corporation (FDIC)—face the same limitations on investment in high yield bonds that are applicable to national banks. Therefore, while state chartered banks are not explicitly prevented from acquiring high yield bonds, in early 1989, the FDIC reiterated its advice that they avoid such securities. When FDIC examiners review the banks' loan portfolios, they are constantly on the lookout for such issues.

Restraint on Thrift Institutions

Federally insured thrift institutions (composed of savings and loan associations and savings banks) can put up to 1.0 per cent of their total assets in debt securities issued by corporations. These debt obligations had included high yield bonds. Moreover, these institutions could hold an additional 10.0 per cent of their assets in the form of commercial loans. Consequently, until last year, Federally-supervised thrift institutions could invest up to 11.0 per cent of their total assets in high yield bonds. However, the S & L rescue legislation adopted last year forbids Federally-insured S & L's from investing in corporate bonds unless they carry an investment-grade rating. Bonds with lower ratings that are already held must be divested by July 1, 1994.

Those laws enacted and regulations promulgated by State governments do allow S&Ls to purchase varying amounts of high yield bonds. In a few states, the ceiling exceeds the maximum of 11.0 per cent previously set for Federal thrift institutions. However, when a state thrift becomes insured by the Federal Savings and Loan Insurance Corporations (FSLIC), it also becomes subject to the restraints applied to Federal institutions.

In practice, only a small fraction of thrift institutions invest in high yield bonds. For instance, as of September 30, 1988, the Federal Home Loan Bank Board (FHLBB) reported that 161 of the 3,025 FSLIC-insured thrifts in the country held such bonds in their portfolios. These figures indicate that only 5.3 per cent of the thrifts held such investments. The latter had a book value of \$13.2 billion—equal to less than 5.0 per cent of their total assets, and roughly 1.0 per cent of the assets held by all S&Ls in the industry. However, 11 of the institutions were holding \$9.1 billion of high yield bonds at the end of September, 1988. This amount was equal to 10.3 per cent of their total assets, and accounted for 69.0 per cent of the high yield bonds held by all FSLIC-insured savings and loan associations.

However, in early 1989, the FHLBB took steps to restrain further the ability of S&Ls to invest in high yield bonds. In January, 1989, a bulletin was issued to thrifts which set out new guidelines to govern investments in high yield securities. These guidelines required the thrift's board of directors to establish investment policies and specific standards for asset diversification. They had to set forth specific steps that must be covered in credit analyses. The boards must also establish standards and determine amounts of loan loss reserves that must be held against each category of investment. The FHLBB bulletin also imposed severe limitations on the ability of insolvent or under-capitalized S&Ls to invest in high yield bonds.

The evidence shows that investment in high yield securities has not been the cause of heavy losses incurred by so many S&Ls over the last few years. Nevertheless, new restrictions have been imposed, and they are likely to limit further the demand for high yield bonds.

Restraints on Insurance Companies

State laws and regulations generally govern investment in securities by insurance companies. Most of the States do not impose constraints on investment in high yield bonds. Where such restrictions do apply, they are differentiated with respect to the treatment of life insurance companies and those writing property or casualty insurance.

On the whole, rules and regulations governing life insurance companies domiciled in New York State are the most strict. In New York, life insurance companies are allowed to hold up to 20.0 per cent of their assets in high yield bonds that are issued to finance LBOs and bonds issued in the form of large denomination private placements. The latter are issued in amounts over \$50 million, and they cannot be sold to the public. A few other States (including Arizona and Texas) have the same type of restrictions, and California is considering adopting similar regulations.

In the case of property and casualty insurance companies, New York State also imposes restrictions on investment in high yield bonds. The regulations specify a minimum amount of the company's capital that is not eligible for investment in high yield bonds. In most other States, there are no restrictions on the ability of property and casualty companies to invest in high yield securities.

Nevertheless, over the early months of 1989, several State insurance supervisors expressed much anxiety over the rising volume of losses incurred by insurance companies. For example, during the four years 1985–88, an average of 18 insurance companies failed. During the decade of the 1970s, failures averaged five per year. The financial cost of the failures has also been climbing dramatically. For instance, during the years 1969–83, the guarantee funds maintained by the States (and from which claims arising from insolvencies are paid off) assessed healthy insurance carriers a total of \$454 million to meet the claims of insolvent members. Yet, in 1987 alone, total assessments amounted to almost \$1.0 billion.

Operating insurance companies have two main sources of income—premiums on policies and income earned on the assets in their investment portfolios. A substantial part of the latter consists of high yield bonds and other noninvestment grade securities. For example, Drexel Burnham estimates that insurance companies held 30.0 per cent of the \$183.0 billion of high yield bonds outstanding at the end of 1988. That proportion translates into an estimate of \$55.0 billion of high yield bonds on the books of insurance companies. The National Association of Insurance Commissioners (NAIC) estimated that, as of the end of 1986, noninvestment grade bonds represented 3.5 per cent of the total assets of insurance companies. For property and casualty companies, the fraction was 0.9 per cent of total assets. Moreover, the NAIC also reported that only 35 of the 4,400 companies supervised by its members had more than 20.0 per cent of their assets in noninvestment grade bonds. On the other hand, Drexel Burnham estimates that, at the end of 1988, 70 per cent of the large insurance companies in the country invested in high grade bonds.

In summary, these figures suggest that high yield bonds represent an important source of investment income for insurance companies. It is also clear that the latter constitute an important source of demand for high yield securities in the capital market. Consequently, any steps taken by State insurance regulators to restrain further the ability of insurance companies to purchase high yield bonds would have a significantly negative impact.

Restraints on Pension Funds

According to Drexel Burnham, pension funds held about 15.0 per cent of the high yield bonds outstanding at the end of 1988. That proportion translates into roughly \$27.0 billion of such assets on their books. The Federal law which governs pension funds is the Employee Retirement Income Security Act (ERISA). It is administered by the Pension Benefits Guarantee Corporation (PBGC). The Act imposes on Plan trustees the requirement to administer pension assets in a prudent manner. This means that investments must be diversified to minimize the risk of incurring significant losses. Aside from these general requirements, there are no specific restraints which would prohibit investment in high yield bonds by pension funds.

In March, 1989, however, the U.S. Department of Labor—which has oversight over the administration of corporate pension funds—accelerated its efforts to restrain the ability of Plan trustees to use their assets to help shape the outcome in corporate takeover struggles. For instance, in late March, the Department filed suit against the former officials of a drug store chain charging that they cheated employees out of \$3.5 million through manipulating the firm's pension plan. The Department also launched an investigation of the way the Polaroid corporation used an employee stock ownership plan as a defensive tool in its successful effort to avoid being taken over by Shamrock Holdings.

On a more general level, the Labor Department has quickened the pace at which it is taking action against plans found to have committed fiduciary violations. For example, such actions rose from about \$42 million in fiscal year 1985 to about \$106 million in 1987. Roughly 40 plan fiduciaries were removed in 1986 and 1987.

The net result of the increased intensity of supervision of pension funds by the Labor Department is likely to be the creation of a much more cautious investment climate. Pension funds currently hold around 18.0 per cent of corporate equity and about 26.0 per cent of corporate debt outstanding. Moreover, they have been major acquirers of new issues of high yield securities. For example, Drexel

Burnham estimates that pension funds absorb roughly 10.0 per cent of the new high yield bonds brought to market.

Legislative Efforts to Restrict High Yield Bonds

Virtually all of the proposed actions by members of Congress to restrict the use of high yield bonds have been motivated by concern over the use of such instruments in mergers and acquisitions—particularly in hostile takeovers. A number of bills have been introduced in both the House and Senate which would impose a variety of restraints. However, aside from the S & L rescue bill, none of the measures have been pushed by the Congressional leadership.

The one previous bill that was enacted (The Comprehensive Equality Banking Act of 1987—Public Law 100-86) contains a provision mandating the Comptroller General (head of the General Accounting Office—GAO) to conduct a study of the “investments made by federally insured institutions in high yield, noninvestment grade bonds during the last five years.” In carrying out that mandate, the GAO produced the following reports:

- (1) “Financial Markets, Issuers, Purchasers, and Purposes of High Yield, Noninvestment Grade Bonds.” February, 1988, 39 pages.
- (2) “High Yield Bonds: Nature of the Market and Effect on Federally Insured Institutions.” Hearing, May, 1988, 327 pages.
- (3) “High Yield Bonds: Issues Concerning Thrift Investments in High Yield Bonds.” March, 1989, 62 pages.

The following bills have been introduced in the Congress to restrict high yield bonds:

- (1) H.R. 685 (Richardson). Securities, Safety, and Soundness Act of 1987. This bill would temporarily prohibit certain equity securities acquisitions financed by takeover (high yield) securities. It would also prohibit Federally insured institutions from owning noninvestment grade securities.
- (2) S.227 (D’Amato) Tender Offer Reform Act of 1987. The bill would revise securities acquisition, tender offer, and disclosure requirements. Hearings were held in June, 1987.
- (3) S.634 (Specter). The bill would amend the Clayton Act and the Securities Exchange Act of 1934 with respect to mergers and corporate tender offers. Specifically, it would prohibit any registered company from knowingly issuing any security that would have a negative impact on the market value of a particular issuer’s already outstanding securities—such as downgrading by a rating agency.
- (4) S.1653 (Domenici). Junk Bond Limitation Act of 1987. This bill would limit the amount of high yield securities that could be held by Federally insured institutions, and it would make debt securities issued in most mergers and acquisitions subject to margin requirements. The bill would also prohibit insured banks from investing in noninvestment grade securities where the proceeds of the issue would be used in takeovers.
- (5) H.R. 1178 (McKinney). The bill would amend the Internal Revenue Code to disallow any income tax deduction for any interest paid or accrued on indebtedness incurred to acquire corporate stock in a hostile takeover attempt.

The Bush Administration—in the person of Treasury Secretary Nicholas F. Brady—has expressed a desire to discourage the issuance of corporate debt by corporations and to promote greater reliance on the use of equity securities in corporate financing. He would prefer to encourage such a shift of emphasis by eliminating the double taxation of corporate dividends. However, he has not pushed the measure because such a step would cost the U.S. Treasury a minimum of \$20.0 billion a year in lost revenue. Because of the persistently large Federal budget deficit, neither the Treasury nor the Congress is prepared to support such a measure.

Concluding Observations

The governmental interventions of the types described here—which would impose additional restrictions on the use of high yield bonds—would distort the functioning of the capital market, and they

ought to be avoided. If adopted, they would discriminate in favor of large, well-established companies with high credit ratings. At the same time, they would limit access to the capital market by smaller, emerging firms (many with bright growth prospects) and by many older firms that are temporarily in distress.

The high yield bond market facilitates the mobilization of funds by less than top rated borrowers who need resources to develop their businesses. While the risk associated with instruments floated by such enterprises clearly exceeds that carried by securities of highly rated companies, the rates of return offered seem clearly to compensate for the additional exposure. On the demand side of the market, investors in high yield bonds (who are principally large financial institutions) are clearly capable of assessing that risk and of making prudent investment judgements accordingly. So, on balance, the high yield bond market is serving a useful economic purpose, and it should not have additional, unnecessary restraints imposed on it.