1990 VALUATION ACTUARY
SYMPOSIUM PROCEEDINGS

Luncheon Speech

Demise of The Junk Bond Market and Other Asset Value Problems

David R. Gardner, CFA

DEMISE OF THE JUNK BOND MARKET AND OTHER ASSET VALUE PROBLEMS

MR. DAVID R. GARDNER*: We are going to talk about the demise of junk bonds! When I was asked to speak, I said I was eminently qualified as I don't own any of those things. Let's look at junk bonds and get a handle on their characteristics.

Investment grade credits start with Aaa and they go down to Baa3 (Table 1). Junk bonds are generally considered Ba1 down to NR. What's the difference between an Aaa credit and an A credit? Let's look at Moody's definitions.

The definition of Aaa from Moody's is as follows: "Bonds which are rated Aaa are judged to be the best quality. They carry the smallest degree of investment risk and are generally referred to as gild edge." In defining Aa, Moody's says, "Bonds which are rated Aa are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high grade bonds." Moody's defines A: "Bonds which are rated A possess many favorable investment attributes and are to be considered upper

* David R. Gardner, not a member of the sponsoring organizations, is executive vice president of Meridian Asset Advisors, Inc.

TABLE 1

MOODY'S CORPORATE RATINGS

Aaa	Ba1
Aa1	Ba2
Aa2	Ba3
Aa3	B1
A1	B2
A2	B3
A3	Caa
Baa1	Ca
Baa2	C
Baa3	NR

medium grade obligations." At Baa, Moody's says, "Bonds which are rated Baa are considered as medium grade obligations, i.e., they are neither highly protected nor poorly secured."

Now you get into the junk category. Let's just pick a couple of these like B: "Bonds which are rated B generally lack characteristics of the desirable investment. Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be small." Moody's defines C: "Bonds which are rated C are the lowest rated class of bonds, and issues so rated can be regarded as having extremely poor prospects of ever attaining any real investment standing." Who cares? Well, we'll show you what the difference between a rating of Baa3 and Ba1 has meant recently to a couple of bonds.

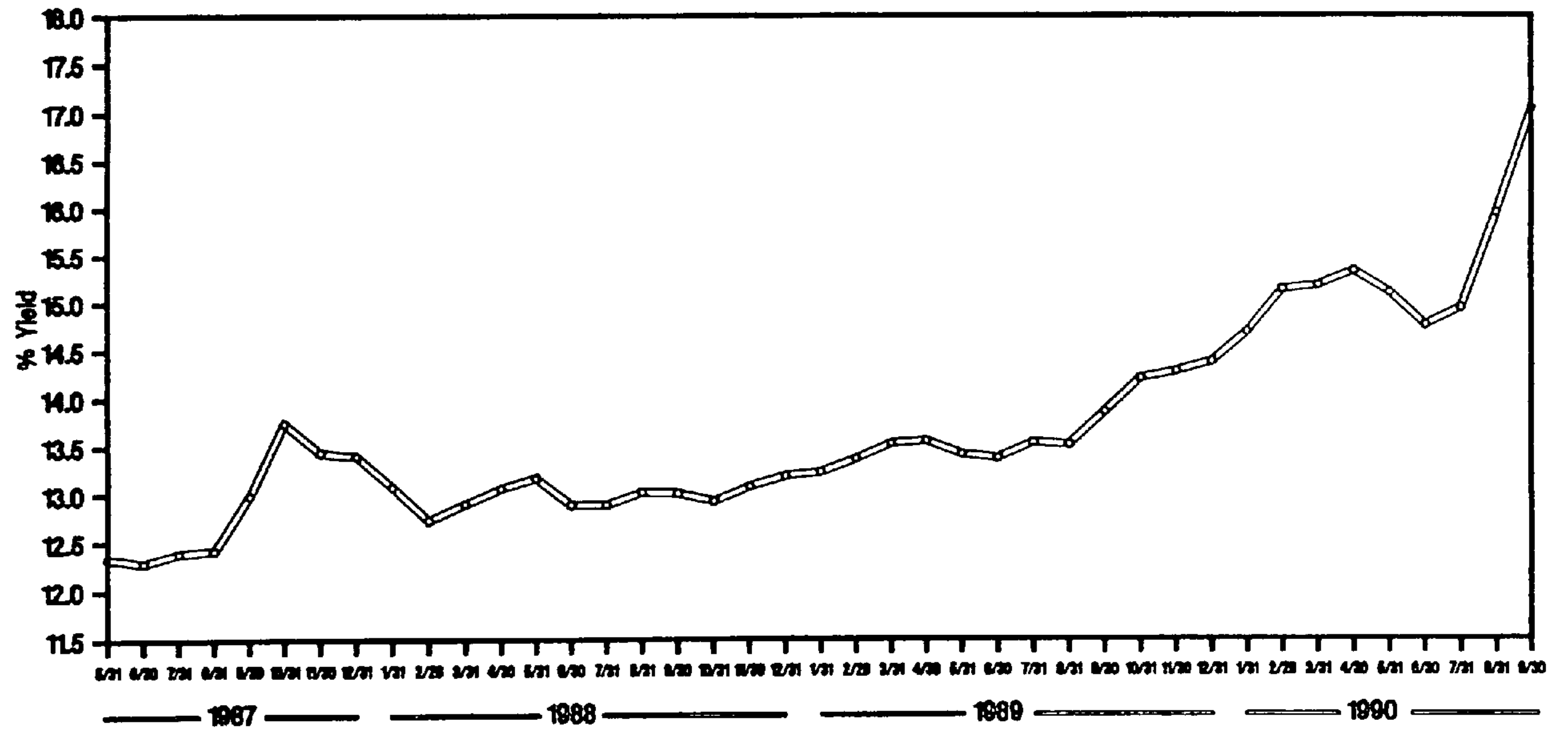
Let's look at the background of this industry. Why was there a search for high returns? This is a simple business. The investment people invest. The marketing people market. It's a real simple business, but it's very competitive. I have attended many investment seminars and have talked to many of my counterparts in this business. I ask how they set and pay such high rates. And they say they don't set rates. I say "What do you mean?" They say, "The marketing guys call up and say we need 10% to get business, so we're going to pay 10%." They hope the investment department can find something that makes the 200 basis point spread.

In a speech I presented to the Society of Actuaries in 1987, we briefly discussed this problem. And, unfortunately, one of my greatest fears seems to have happened. Insurance companies were paying too much and not making enough spread. The temptation was to purchase low quality credits.

Chart 1 shows Merrill Lynch Global Indices -- all high yield bonds. These are the junk bonds. Merrill Lynch is very smart. It doesn't sell too many of these things, but it keeps track of them. In May of 1987, yields were about 12.5% on the junk bonds. They ran up to about 14% in late 1987, and essentially have traveled very slowly upward, all the way through the middle of 1989. For those people who were interested in junk bonds, we had a pretty good economy. People didn't worry much about defaults, and for companies needing the spread, it was pretty easy to go ahead and purchase lower quality issues. Unfortunately, if you thought junk bonds were a great buy at 12.5%, you have a great opportunity at about 17.75% to buy them now.

CHART 1

MERRILL LYNCH GLOBAL INDICES
ALL HIGH YIELD BONDS
Yield



Also, unfortunately, prices are almost the inverse of yields (Chart 2). We started at about 110 in 1987. Prices were above $100 most of the time. In 1990, the market decided it had had enough, and prices dropped dramatically. And we haven't even had a recession yet.

Let's look at some examples.

Table 2 gives data on a Bank of New England 9.875 subordinated note. This has been in the market since 1982 or 1983. There was a little downgrade there before the bond came out. On September 13, 1989, it had its initial public offering (IPO). The bond was trading at $99.92. On October 3, 1989, it was downgraded. Despite the downgrade during most of 1989 the bond price stayed around $93.50. Then things started to get a little shaky for the banking industry. All of a sudden, December 18, 1989, the bond was downgraded from a Baa to a Ba2. We're in the junk bond category now. The next downgrade was from Ba2 to B3, and the bond goes from $80 to $60 to $25. Then, it was downgraded from B3 to Caa. And now you can buy that bond at $14.10. Now the problem for investment is not buying this little piece of excitement. Believe me, there are lots of people who would sell it to you, if you wanted to buy it. It's owning it that's the problem. And under statutory accounting principles, guess how most insurance companies used to be able to carry this bond on their statements: at $100.

CHART 2

MERRILL LYNCH GLOBAL INDICES
ALL HIGH YIELD BONDS
Price

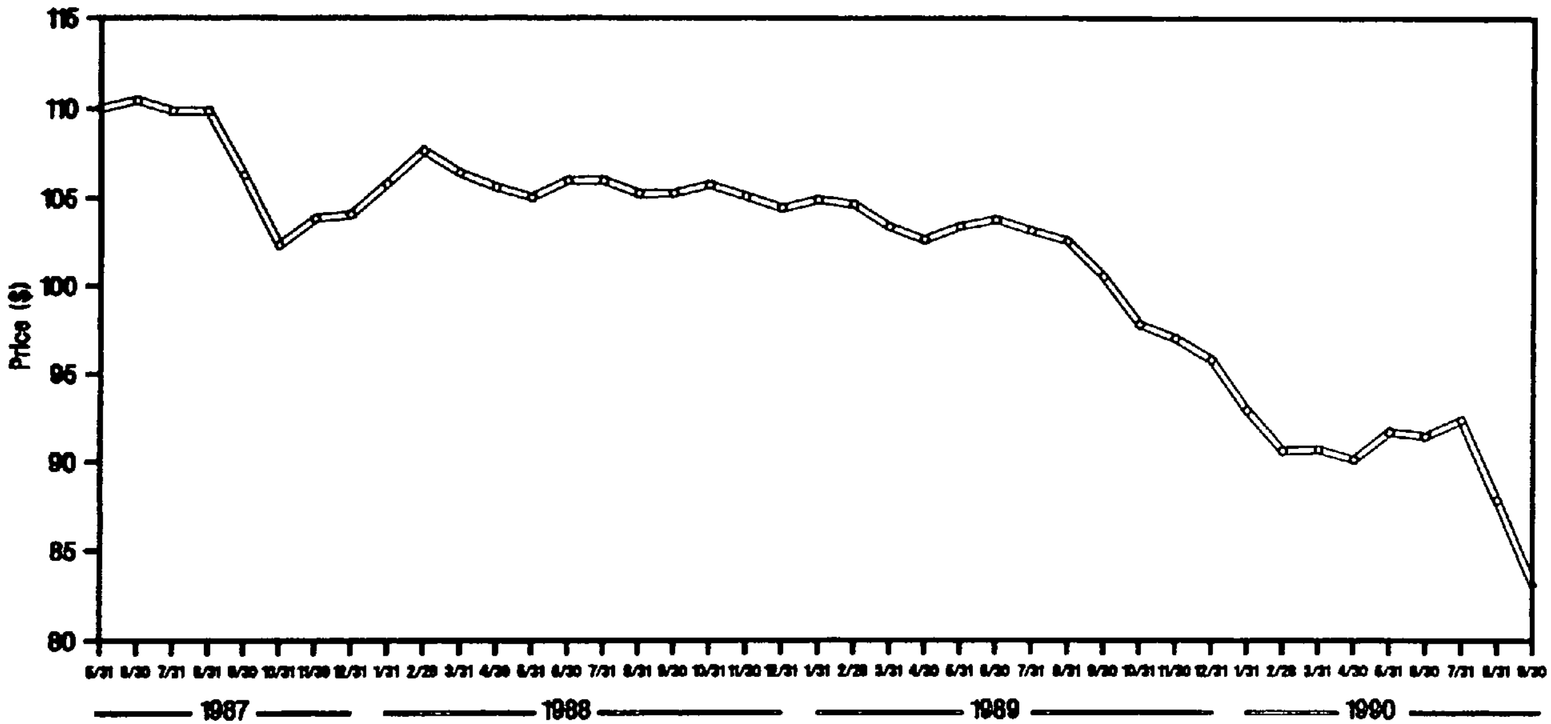


TABLE 2

BANK OF NEW ENGLAND
9.875 SUBORDINATED NOTE DUE 9/15/99

DATE	RATING	PRICE
07/14/89	A2 - A3	
09/13/89	IPO	99.92
10/03/89	A3 - Baa2	
11/30/89		93.50
12/15/89		80.00
12/18/89	Baa2 - Ba2	
01/12/90	Ba2 - B3	
01/15/90		60.00
03/01/90		25.00
04/06/90	B3 - Caa	
10/23/90		14.00

Let's try another one (Table 3). This is another favorite credit, Unisys Corporation. In 1987, it got upgraded, and then it got downgraded again. Then it got downgraded again and it fell below the magical Baa. What's scary is to look at the price action (Table 4).

On September 17, 1990, it was $99.625. On October 2, 1990, it was $93.25. Then it got the downgrade. On October 15, 1990, it was $75. On October 23, 1990, it was $45. In three weeks we lost 50%.

What's happened to other securities during this period? Here are A-rated bonds ten years in length (Chart 3). Yields started around 9.40%. Presently, they are 8.55%.

Here's price action (Chart 4). Prices started around $93 and ended up around $92. We got up to $97 on this index and down to about $84. That wasn't too bad -- up a little, down a little.

Let's make a comparison of ten-year credits and junk bonds. The high-yield bonds (top line) started at 12%, and now we can get the high yields at 17.75% (Chart 5). The investment grade (bottom line) started at 9% and ended at about 9%.

TABLE 3

UNISYS CORPORATION
10.75% DUE 11/1/95

DATE	RATING
06/22/87	Baa2 - A3
09/12/89	A3 - Baa2
11/06/89	Baa2 - Baa3
10/02/90	Baa3 - Ba1

TABLE 4

UNISYS CORPORATION
10.75% DUE 11/1/95

DATE	PRICE
09/17/90	$99.625
10/02/90	$93.250
10/15/90	$75.000
10/23/90	$45.000

CHART 3

MERRILL LYNCH GLOBAL INDICES
CORPORATE AND GOVERNMENT - A, 10 YRS+
Yield

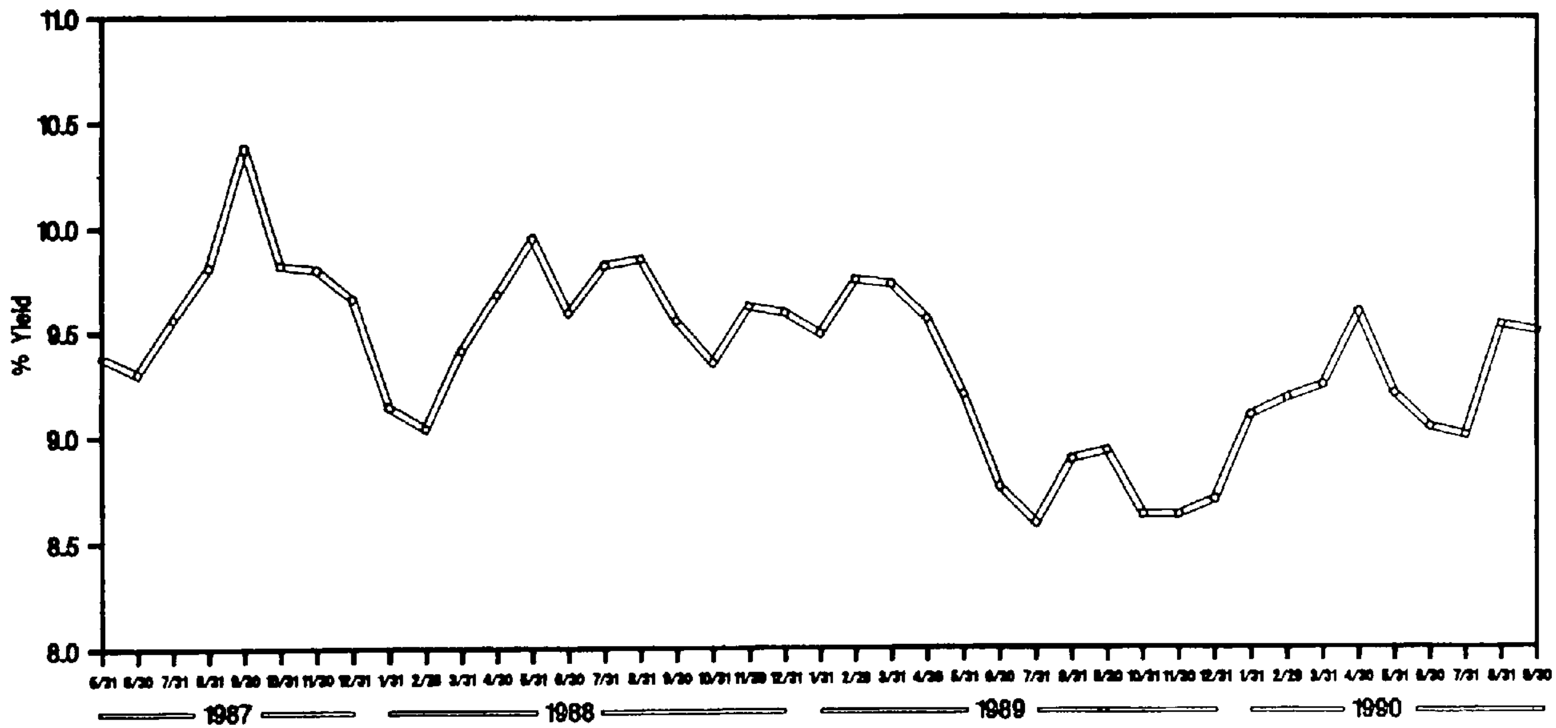


CHART 4

MERRILL LYNCH GLOBAL INDICES
CORPORATE AND GOVERNMENT - A, 10 YRS+
Price

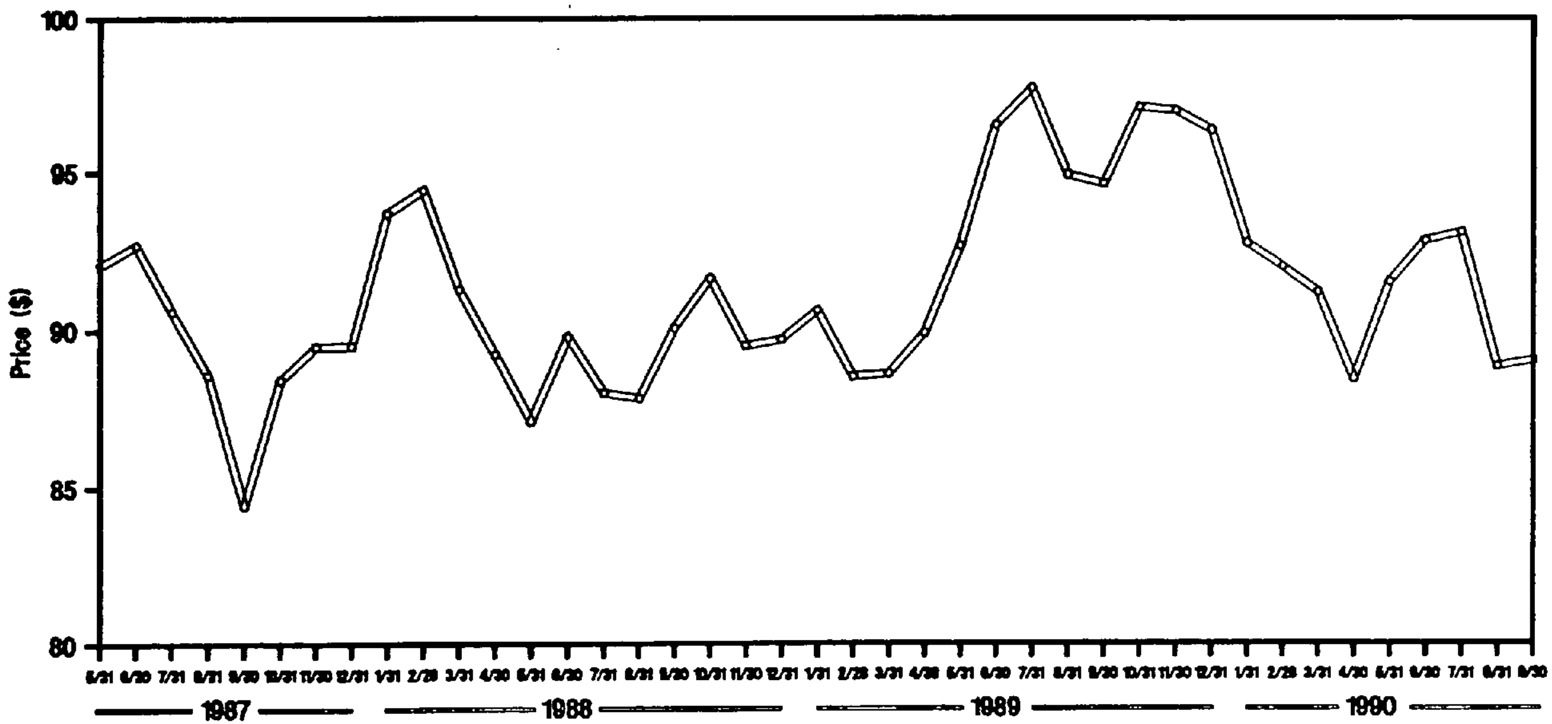
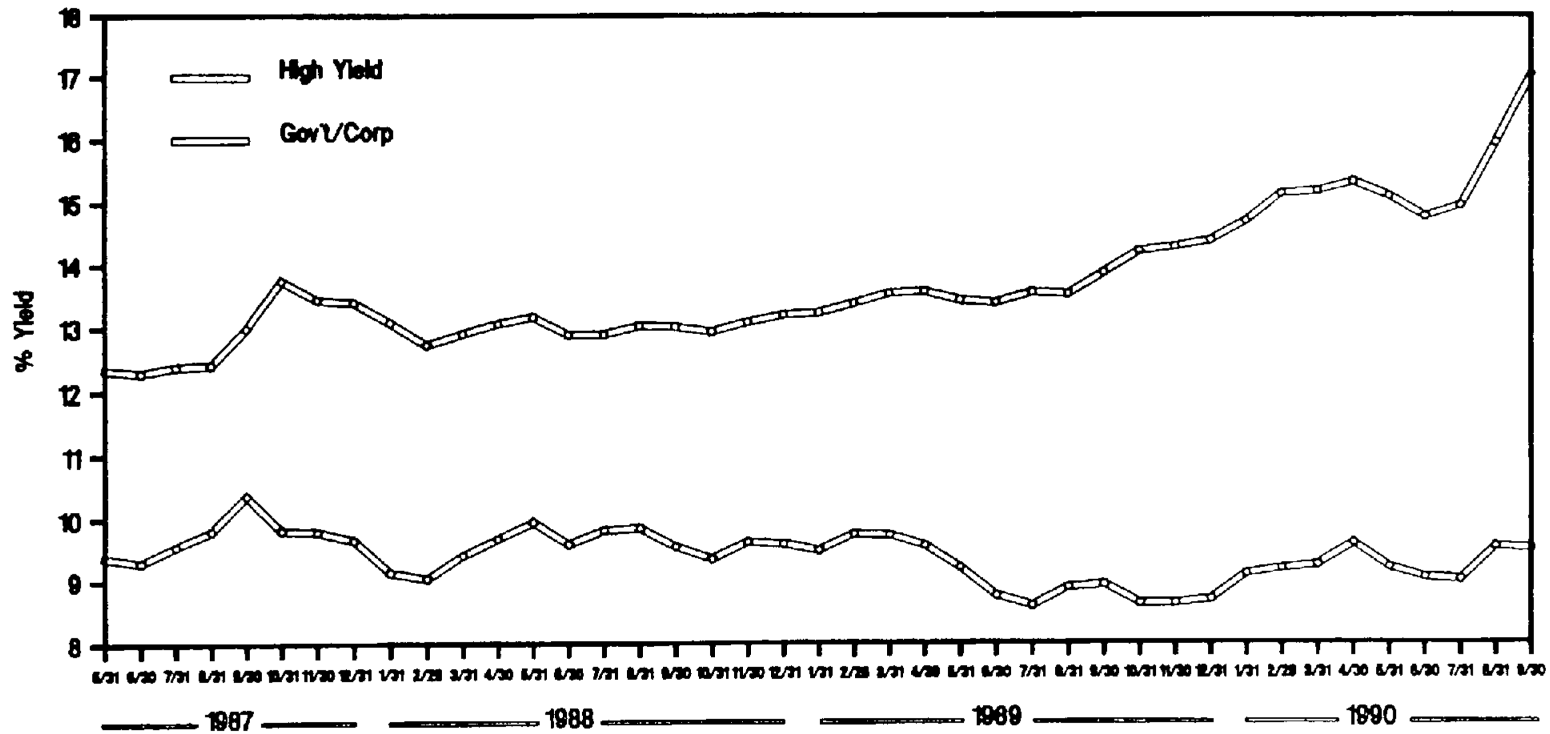


CHART 5

HIGH YIELD/CORPORATE AND GOVERNMENT
Yield



Here's price action (Chart 6). The investment grade (bottom line) ran up a bit and ended at the same level at which it started. The high yield or junk (top line) started at $110 and now is down below $80.

A recent article in *Barron's* discussed the problem of junk bonds and surplus. I am not going to comment on whether it's accurate, fair, or even whether it's well-written, but clearly there is an issue now in the life insurance industry. The issue is protection of surplus. Table 5 is out of the *Barron's* article. I'm not picking on any of these companies. I don't know anything about their portfolios. They all could be Bb+ securities, and they're going to be fine. The issue is that now a significant percentage of assets are accounted for by bonds below investment rate. For example, 50% of Executive Life, or 620% of surplus, is below investment grade. I don't know whether that's a problem, but at least a lot of people think it is.

I want to leave you one concept to take home: JUNK BONDS ARE EQUITY, NOT DEBT. It's real simple. As actuaries, once you determine how to value equity, you've got the method for valuation of junk bonds. They are not debt instruments, in my opinion, but a form of equity.

CHART 6

HIGH YIELD/CORPORATE AND GOVERNMENT
Price

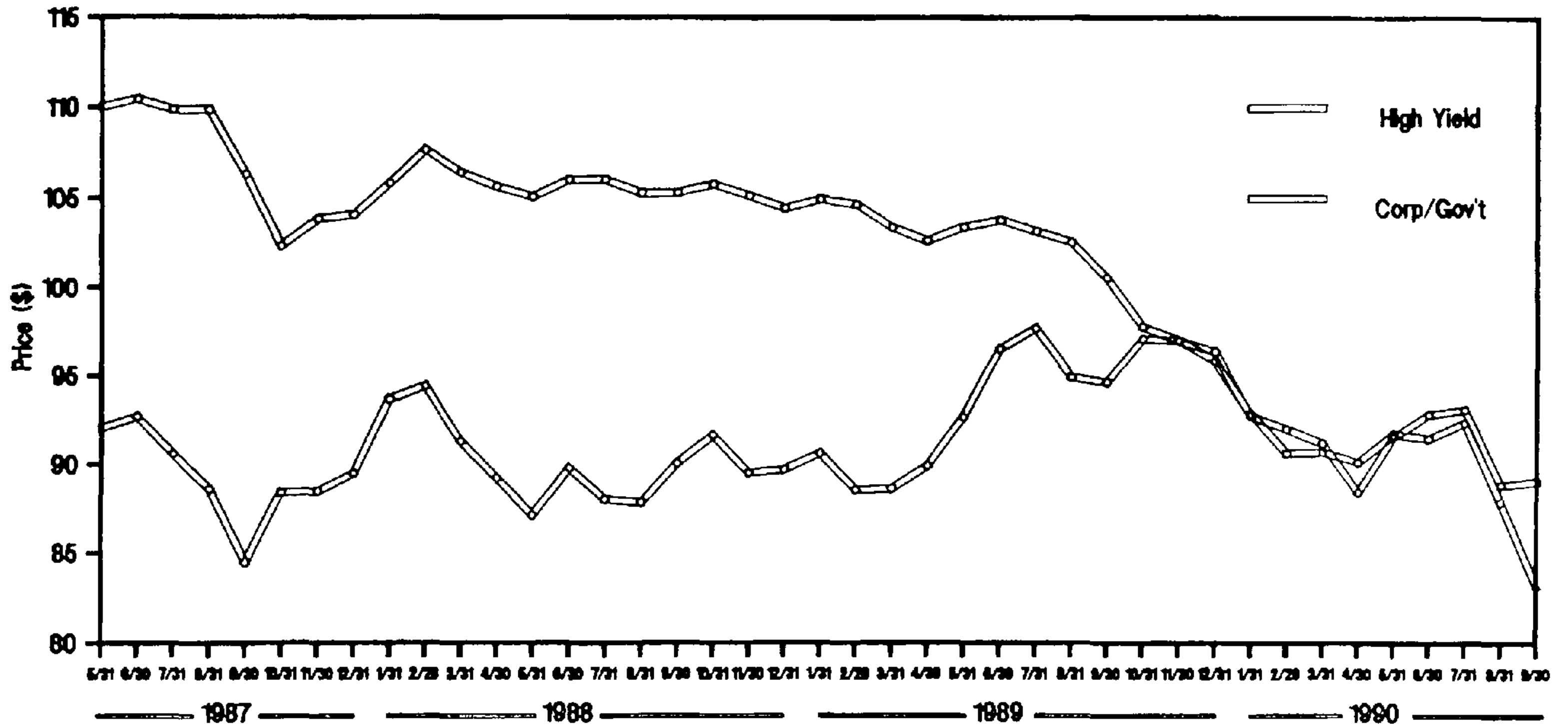


TABLE 5

PAPER THIN PORTFOLIOS

	% of Invested Assets Accounted for by Bonds Below Investment Grade	Junk as % of Total Surplus
Executive Life	50.7	620
Presidential Life	26.4	385
First Capital Life	20.2	432
Fidelity Bankers	18.3	462
Jackson Nat'l	14.5	245
United Pacific	14.2	217
Kemper Invs.	13.8	327
Southwest Life	10.3	163
Sun Life Amer.	9.6	137

(Barron's/Moody's Investors Services and Townsend & Schupp Co.)

Let's take the example of Sealed Air, a great corporation. Several years ago, management saw the company's heavy cash generation and believed that there was the risk of an unfriendly, perhaps hostile takeover. What did management do? It paid all its equity out in a dividend. The company leveraged itself to the hilt. Do I think Sealed Air is going to make it? Yes, because I think it has a cash machine. But the debt that it issued became a form of equity. Remember back in Finance 101? In a case of default, payouts are ranked as senior debt, and then there's first-mortgage bonds, and then subordinated debt. Then there's preferred stock, and then there's equity. When a company goes bankrupt, what happens to the equity players? They're gone, and the preferred stock players may also get to leave town. And who's left? The debt holders. By definition, when debt holders are the only players left, they are at risk. They are the equity players. If a company's going to work its way out of bankruptcy the debt holders are the ones that are leveraged. They participate in the rebound of a corporation that is in trouble, and that's why I'm arguing that when you get a chance to look at junk bonds you have to ask the question, "How do I value equity?" because that's what I think junk bonds are.

Now I don't think all junk bonds should be taken out of life insurance companies' portfolios. I'm not saying that. I'm saying that it takes more than small investment departments to own these things. If I was going to go into a life insurance company and check out its ability to own junk bonds, I'd like to know how many people are following them.

How often do the people go out and visit these companies? You expect visits when companies own equities. You expect the analyst to follow the company, go see the corporation, and see what's going on in order to understand its operations. There should be no difference when you own debt. You get a small insurance company that thinks that it can buy a junk bond fund or that it can own three or four selected junk bonds. A small company can't follow the credits because the treasurer is doing it on a part-time basis. I think you have a prescription for problems. And if the marketing people are setting the interest rates and the investment guys are supposed to make investments to cover the spread, who's left to watch out for policyholders? You are!

This is not just a U.S. problem. This is an international problem. In a recent article entitled "Global Debt" in *International Finance* the size of the international debt problem was discussed. How big is the U.S. deficit this year? It's about $300 billion, a nice, round number, and we're not even in a recession yet. World debt from 1982 to 1989 went from $3.4 to $10.4 trillion. U.S. government debt tripled from $1.1 trillion in 1982 to $2.9 in 1989. Western Germany has a $75 billion trade surplus, which is expected to evaporate with the joining of the two Germanies. Eastern Europe and the Soviet Union are only $150 billion in debt. The Sahara-African nations are $135 billion in debt. Third world nations, which are technically bankrupt, have about $1.3 trillion of debt they can't get a clue as to how to pay back. The Japanese have a debt hangover. Nobody's really talking about this, but there's about $125 billion owed in Japan. The Japanese did a real interesting thing. They decided to issue debt with warrants attached, and if the stock price went up, they never would have to pay the debt back. So it was a good plan. Except now that their market has gone down and the warrants may not be exercised, they have about $125 billion to figure out how to pay off.

I really think that valuation actuaries stand in front of the world here, protecting the investment people from themselves, and I know it's a pretty unpopular thing. So I encourage you to learn more about investments in order to help get a handle on the problem.

FROM THE FLOOR: What you are talking about are mostly public issues. What about some of the inherent problems with the private placements?

MR. GARDNER: The problem is compounded in private placements because of the liquidity problem. We've discovered that we have enough liquidity problems with publicly traded debt. Private placements can be even more difficult, especially when they begin to go bad. For example, we took over the management of a small insurance company's portfolio, and it had an interesting piece of paper. It was private placement. The debt carried a rate of 15% for the first five years, but a zero coupon, which means that it accrued at 15% in the first five years. So we attempted to sell the bond a year and a half or two years ago, when the market for junk was healthy. It was two weeks before we got a bid. It wasn't multiple choice. It was a single bid. Again, I think it points back to the same thing we were talking about earlier, that is, if you have a corporation that can follow these credits, can go out and see them and talk to management, and find out what's been going on, that's a whole different story than a company that's merely calling its local, friendly broker and buying whatever's available.

FROM THE FLOOR: But last year at this same meeting the general speaker was promoting the resurgence of junk bonds, how great they were, that this is the way to get your spread, and he was basically telling the situation that he saw at that moment. You are telling the situation as you see it. Next year what does somebody else tell us?

MR. GARDNER: Well, it depends on whether you invite me back or not. I'm in print on this question. One of my fears was that the property/casualty industry was getting adverse press about the difficulties in the property/casualty business but that the life industry was feeling real smug. And I have been attempting to get people's attention, in order to say that the next big crisis in the insurance industry is going to be the life industry. And I've been saying that since 1987. I believe and I hope that the industry can withstand the shocks that are coming up. We have a unique situation with the companies that we work with. The investment people get to set the rates that the marketing people get to pay. We sit down and we say, "This is what we can earn, and this is the type of credits that we're willing to own." Then you tell me what the spread is, we'll subtract the spread from the portfolio, and that's what you get to pay. Now if a company has assets hidden away someplace (i.e., surplus) that it wants to subsidize the product with, then that's a decision that the corporation needs to make. But if you're looking at a stand-alone, fully loaded product, then I can tell you what you can afford to pay, and you can decide whether you're going to be in the business or not. What that's done in a number of cases is cause a redesign of the product to narrow the spread. But we have not raised rates artificially in order to try to get the key business in.

FROM THE FLOOR: Can you give us a forecast on junk bonds?

MR. GARDNER: I believe the economy has about a 40% chance of being in a fairly significant recession in 1991, and I believe that a significant recession will adversely impact corporations that need to have high cash flow in order to support debt. That does not mean that all junk bonds will go out, but I think that we will see a significant increase in the default rate. Whether or not companies make it through that depends on what credits they own and how they manage their portfolios. Also it makes a big difference as to what they're willing to pay in rates to policyholders.

FROM THE FLOOR: Take the big companies like CIGNA and Travelers. Are these problems totally reflected in the price of their stock, or is it going to go down even more?

MR. GARDNER: Oh, what an easy question. The market has historically double-discounted bad news. So it would not be unreasonable to expect that, if the bad news in the press comes to pass, you would get a second wave of selling. Now whether you are smart enough to make money on that is a question only you can answer. I think the bank stocks are very depressed. I think the insurance stocks are very depressed. But for a reason why investors should buy these issues: When you know when the next piece of good news is coming, that's when you should buy.

FROM THE FLOOR: Well, you know, junk bonds are being trashed and virtually all the mortgages are in trouble and real estate is drying up. Private placements, as you said earlier, are becoming less liquid. Where exactly do we turn to for the dollars to invest?

MR. GARDNER: Well, there's a lot of mortgage-backed securities out there that tend to trade at about 120% over the curve. I know that you have prepayment risk to deal with, but we've always argued that it's easier for an insurance company to deal with the prepayment risk than to deal with the default risk. One possible action is for insurance companies to educate the public. Banks sure don't feel safe. Certificates of deposit don't feel real safe. Savings and loans don't feel real safe. The insurance industry had a perfect opportunity. We were the safest industry in the financial area. But now, we've got a six-page article in *Barron's* talking about how there's really no surplus because it is invested in junk bonds. Insurance companies can't pay so much on products. Unfortunately, what the industry is going to have to do is to live with the problems and work its way out. Our industry is generally in a positive net cash flow, so the investment people, the marketing people, and the actuaries have a chance to improve the quality that goes into the portfolio in the future. They don't have to keep buying the same old stuff.