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# FINANCIAL GUARANTEES

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-- Types of coverage offered
-- Pricing considerations
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MR. PETER P. KELLY, JR.: I'd like to start by providing a bit of history about the financial guarantee industry. Its first component was the municipal bond insurance industry, which began in 1971 when the American Municipal Bond Assurance Corporation (AMBAC) was founded. It is now owned by a consortium of institutional investors led by Citibank, and including Xerox Financial, AMBAC Management and Stephens Inc. AMBAC has current capital of $610 million and its municipal bond guarantees are rated Triple-A by both Standard & Poor's (S&P) and Moody's.

The Municipal Bond Insurance Association was formed as a joint underwriting association in 1973. Later in 1987 Municipal Bond Investors Assurance Corporation (MBIA) was formed and is now owned 85% by Aetna Life & Casualty, Fireman's Fund, CIGNA, and Continental with 15% public ownership and common shares traded on the New York Stock Exchange. MBIA has also received Triple-A ratings from S&P and Moody's and its current capital is $495 million.

The other major players in the municipal bond insurance industry are as follows: the Financial Guaranty Insurance Company (FGIC), founded in 1983, Triple-A rated by S&P and Moody's with capital of about $393 million and, again, a consortium of institutional investors that include GE Capital, General RE, Kemper, Shearson-Lehman and others; Bond Investor's Guaranty (BIG) founded in 1985, capital of $150 million, also Triple-A rated by S&P and Moody's with institutional investors that include American Insurance Group (AIG), Bankers Trust, Geico and Xerox Credit; and the newest entrant in the municipal bond insurance industry, Capital Guaranty, founded in 1986, having at the moment a Triple-A

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rating from S&P and a Triple-A rating assignment from Fitch, capital of $100 million and investors that include Baltimore G&E, Fleet/Norstar, SAFECO, Sibag Finance and USF&G. These can be called monoline insurance companies in that their primary business purpose is to write municipal bond and note financial guarantee insurance.

The financial guarantee industry is basically a two-sided barbell with the municipal bond financial guarantee industry at one end and at its other end is its newer component -- the corporate financial guarantee industry. The primary participants here include the following: Financial Security Assurance (FSA), founded in 1985 with Triple-A ratings from both S&P and Moody's as well as Nippon and Fitch, capital of over $200 million with a large group of institutional owners including Canadian Imperial Bank, the Equitable, Ford Motor Credit, John Hancock, The New England, TransAmerica and Westpac Banking Corp; Capital Guaranty, founded in 1986, rated Triple-A by S&P with $100 million in standby Letters of Credit (LOC) facilities as part of its capital base, with institutional investors including Constellation Investments, Fleet/Norstar Group, SAFECO, Sibag Finance and USF&G; and Capital Markets Assurance Corp, founded in 1987, rated Triple-A by S&P and Duff & Phelps, with capital of $200 million and now wholly owned by Citibank. These three new corporations, though fledgling relative to their recent establishment, are solid and are becoming more active in the area of non-municipal types of corporate guarantees.

There are several different kinds of insurable corporate financings in which corporate financial guarantors are beginning to get involved. These include structured financings backed by corporate bonds, consumer receivables, commercial real estate mortgages and leases and other investment-grade credits backed by marketable assets. Dan will be discussing this segment of the industry later.

I will focus my discussion primarily on the municipal bond market. Four basic types of municipal financial guarantee products have been offered since 1971. First, of course, the coverage of timely payment of scheduled principal and interest for tax-exempt or taxable state, county and municipal new issue bonds and notes. Secondly, the coverage of timely payment of principal and interest on secondary market municipal issues; that is to say, that huge supply of $750 billion of outstanding state, county and local debt and also including publicly structured financing guaranteed by the American Loan Guarantee Association (ALGA). ALGA is a joint underwriting participation of MBIA, AMBAC, FGIC, BIG, FSA and Capital Guaranty involving a number of insured loan transactions from the Federal Government's massive loan portfolio, for example Farmers Home Administration rural housing loans, now being sold by the Federal Government to help reduce the federal budget deficit. A third product provides insurance for closed-end, tax-exempt unit investment trusts as well as open-end managed mutual funds consisting of tax-exempt state, county and municipal bonds. Lastly there is a financial guarantee product to provide a surety bond substitute for debt service reserve funds which formerly had to be capitalized into a new issue by state, county and local governments.

In terms of financial guarantees, the "ante," as far as the rating agencies are concerned, for a new entrant in the primary or direct writing market is $200 million in equity capital. If you read the recent S&P analysis on financial guaranty companies, that requirement would typically be $150 million in equity or cash and/or $50 million of reinsurance capacity. This is a "long tailed" business; in terms of their maturity structure and policy terms, financial guarantees in the municipal and corporate area go as long as 35 to 40 years and longer.

Guarantees generally feature the timely scheduled payment of debt service when due, but no acceleration is provided for in the event of an early bond call or other kind of catastrophe call. What we agree to do is effectively stand in the shoes of the issuers, to meet their obligations should they, for some reason, become financially unable to do so.

Typically the insurance premiums are paid up-front but occasionally, depending on the structure of the transaction, premiums may be paid monthly or annually. No deductible is provided: the first dollar loss is covered under the terms of the typical municipal bond or corporate bond guarantee policy. As soon as evidence of default is presented through the paying agent to the trustee, it is the responsibility of a fiscal agent of the financial guarantee company to present payment in exchange for the defaulted bonds and coupons.

What are the benefits of financial guarantee insurance? What is it all about? Well, basically, we guarantee the return of principal at maturity as scheduled and we guarantee the timely payment of interest when due. Triple-A credit ratings on insured bonds are not affected by any change in the state, county or local government issuer's underlying credit or, in the case of corporate financial guarantors, by any change in a corporation's underlying credit. There is, in other words, an implied floor on the credit rating of the insured debt that goes to the credit of the underlying financial guarantor. If there is a deterioration or slippage in a municipal issuer's position to the extent that future downgradings take place, so long as the underlying financial guarantor's financial statements are strong enough to merit Triple-A ratings, those Triple-A rating assignments will remain intact on the insured debt. That is the important point.

Financial guarantee insurance can also enhance credit value and make bonds more marketable. What does this mean? Well, with the greater volume of highly structured, very intricate transactions now being sold -- not only general obligation, full faith and credit-backed municipal bonds but also very complex utility revenue deals, single family and multi-family mortgage revenue bonds, college and university financings, toll roads, airports, etc. -- most investors have neither the ability nor the inclination on an ongoing basis to judge or keep track of a particular issuer's credit quality. Unless they're in the business, they'll often look to a financial guarantor, a third party, to take the burden of credit assessment as its responsibility and alleviate that concern. Insured bonds are therefore oftentimes more marketable and high net worth individuals and such retail proxies as insured managed funds and insured unit investment trusts will often buy insured bonds versus uninsured bonds simply because they are more marketable to their clients.

Who benefits from financial guarantee insurance? First of all, with a Triple-A insurance guarantee, state, county and local government issuers and certainly corporate issuers receive better bids, more bids and oftentimes stronger bids on their securities in the competitive or negotiated markets simply because the guarantee takes away a lot of the "story" that surrounds an otherwise typical BAA or an A-rated security. This usually results in lower overall effective borrowing costs to the issuers. Investors benefit from the safety, peace of mind and freedom from worry over potential municipal and corporate credit downgrades to the extent that they own that insured debt. Underwriters and traders benefit from enhanced marketability and greater trading opportunities as spreads vary between insured and non-insured securities of different issuers and different maturities. Lastly, taxpayers are the ultimate beneficiaries of the lower tax rates that result from lower borrowing costs.

The financial guarantee industry was in its infancy during the 1970s and it took a while for market acceptance to start to grow. Beginning in 1980, however, when 3% of all new issue state, county and local government bonds sold in the United States came with guarantees, demand grew quickly with nearly 25% of new issues insured during 1984-1985. In 1988 nearly 26% of new tax-exempt issues are expected to be marketed with bond insurance. That's $26 billion out of $100 billion likely to be issued by state, county and local governments in 1988. There was a slight drop to 18% and 20%, respectively, in 1986 and 1987 due primarily to the greater volume of new issues and refunding of state, county and local governments absorbed into the 1985 calendar year in advance of the Tax Reform Act. As you know, under the terms of the Tax Reform Act of 1986 a lot of state, county and local government issues and also Industrial Development Bond (IDB) and other types of transactions were greatly curtailed relative to private activity bonds. New issues that might have been done in 1986 and 1987 were really mortgaged in 1985. In 1988, we're back to a more normal new issue refunding volume of around $100 to $110 billion.

Four factors contributed to the strong growth in municipal bond insurance in the decade of the 1980s: a flight to quality spurred by a number of well-publicized defaults; the push for market access by smaller issuers; the growing complexity of bond financing in the 1980s; and the increased credibility of highly capitalized financial guarantee participants themselves.

The strong growth in municipal bond insurance in the decade of the 1980s can be attributed in large part to the occurrence of several large and well-publicized defaults. A good example of this would be the Washington Public Power Supply system, Projects 4 and 5 revenue bonds issued to finance three major nuclear utility construction projects in the State of Washington. Other examples that come to mind include the moratorium on the New York City notes in 1975 and a number of other hospital and nursing home defaults around the country where issuers were not able to pay debt service on their outstanding bonds on a timely basis.

These and similar situations to some extent sparked a flight to quality by investors. A lot of people really like to buy yield, but when it comes to buying a little extra yield and taking a bond that might default, they really don't want to buy a bond that's going to go into default. They don't want to read about a bond that's in the newspapers everyday or about a credit that might be deteriorating. Frankly, there is not enough extra yield in it for them to take on that risk. Bear in mind that we are not talking about 200 or 400 basis points more in yield. We're really talking about the differential being 15 to 30 basis points in yield at most and in many cases in recent months, it's been more like 10 to 20 basis points.

Also during this period, market access was very limited for smaller issuers without insurance. There were many towns across America that were essentially restricted to small localized markets and could not sell their securities in national markets. With insurance from MBIA, AMBAC, FGIC and other financial guarantee companies, a national market for those local names was developed and resulted in enhanced marketability and lower borrowing costs for those issuers.

Of course, as I mentioned previously, the problem posed by the increasing complexity of municipal revenue bond financing was confronted during this period as never before. I'm not sure how many of you read official statements from state, county or local governments or from corporations every day, but they get thicker by the inch, it seems, with each passing year. Again, as the complexity of structured financings became increasingly difficult for investors to cull through, they saw an opportunity to displace that obligation on their own part through the substitution device of a financial guarantee provided by a Triple-A rated municipal bond insurance company. Investors recognized that the municipal bond insurance company, in order to receive a Triple-A rating from Moody's and S&P, had to meet a number of very stiff requirements and must employ a number of highly trained municipal bond professionals to do the analyses. Effectively, with the guarantee, they passed the responsibility along to the financial guarantors because that was really what they were getting paid for.

Finally, industry growth was aided by increased credibility in the municipal bond industry due to highly capitalized financial guarantee participants. In the decade of the 1980s the financial guarantees offered by AMBAC, MBIA, FGIC and the newest entrants, BIG and Capital Guaranty, became more widely known and accepted by a marketplace looking for a haven to protect against credit downgrades. Again, we've come off seven years of biblical feast -- who knows whether we'll be moving into seven years of biblical famine relative to municipal credit quality. People don't really feel that they're being paid enough in the yield that they receive on their bonds to take the risk of future possible credit downgrades; therefore, they like to insulate themselves by using municipal or corporate insurance guarantees.

How is the industry regulated? Well, basically, each state has very specific and detailed financial guarantee regulations to assure compliance with capital requirements and exposure. Also the rating agencies, particularly Moody's and S&P, are very vigilant with respect to regulation of the various financial guarantee companies in both the municipal and the corporate bond insurance industries to ensure they maintain adequate capital and reserves to qualify for ongoing Triple-A ratings. In addition, FGIC in 1986 and MBIA in 1987 issued initial public offerings of common stock, and both are listed on the New York Stock Exchange, so they both have to fulfill all requirements of public ownership such as filing a Form 10K with the SEC.

Ultimately, as far as capital adequacy is concerned, the claims-paying resources of a municipal bond or a corporate bond insurance company really consist of their policyholder surplus and reserves, premium income, investment income, reinsurance and other capital.

Policyholder surplus and reserves include equity capital, retained earnings, contingency reserves and unearned premium reserves. Contingency reserves are funded by 50% of earned premiums received upon policy issuance and held in a reserve for 20 years. The interest earnings on this reserve can be taken into income but the corpus, the principal of that contingency reserve, regardless of the term of the issue insured, must be held in reserve for 20 years, after which it flows to the unassigned surplus account.

Unearned premium reserves are premiums received up-front at inception of the policy but earned over the policy term as the underlying debt is paid down.

Reinsurance basically augments primary capital. It's somewhat similar to the situation of a property-casualty company reinsuring property-casualty company writings; we use reinsurance also for municipal bond and corporate bond guarantees.

Other capital can include direct pay letters of credit with highly rated major banks that also can be drawn on to meet future capital needs, or standby agreements or commitments from corporate owners to downstream additional capital if, as and when needed. Ordinarily in those cases the amount of the commitment decreases as the capital base of the insurer grows. It's not basically an unlimited deep pocket, but it's there to a limited extent and to the extent used it has to be replenished.

As far as capital adequacy ratios, both Moody's and S&P have developed highly detailed capital allocation models, based on historical default experience over the last 60-70 years as far as municipal and corporate credit is concerned. These are two completely different highly complex analyses that assign capital charges of varying percentages to the different types of bonds insured.

Capital adequacy is determined essentially by whether the insurer is reserving the proper percentage of capital relative to insured risk. Typically speaking, the safest types of bonds are full faith and credit-backed state, county or local general obligation bonds and these usually require the smallest amount of capital set aside by the rating agencies. From there the amount of capital required moves up the chain depending on the type of bond that's insured to, say, nursing homes or pollution control revenue bonds issued by utilities which may require up to a 30% or 40% capital allocation charge.

Each rating agency has its own determination of capital required to be set aside by each of the financial guarantee companies. I can assure you that this is very carefully monitored. The rating agencies are in practically all the time to examine our book of risk underwritten and to make sure that we're complying with their capital requirements.

The State of California currently has the most conservative regulations on risk to capital requirements. At the moment the risk to capital ratio being used is a 200 to 1 exposure ratio, that is, $200 of net exposure to every dollar of capital of the insurer.

How do Moody's and S&P evaluate financial guarantee companies? They do publish their underwriting guidelines for financial guarantee companies in their usual publications. Effectively, they're concerned about the quality of the underwriting and surveillance policies of each financial guarantee company. Do they have analytical professionals, lawyers, CPAs, bond counsel or people who were formerly bond counsels? Do they have people with corporate bond experience? What types of surveillance practices do they have on their book of business? Because these policies are absolute, unconditional and irrevocable, they are there until the last dollar of insured debt is retired and the rating agencies want to know that these companies are adequately prepared with a trained surveillance staff on hand to monitor that business.

You might ask why this stress on surveillance? After all, you are on the risk anyway. Well if there is credit deterioration or slippage that we know about well in advance, we can usually send out teams to work with the issuers, their investment banker, their bond counsel, their financial advisors or their state authorities as the case may be, to make sure that a default doesn't happen. Very few issuers ever really want their bonds to go into default, but sometimes they do, either through errors of commission or omission. We're there to try to help make sure, in our own case, that we don't have a hit, and secondly, that the issuer is taking the necessary positive steps to cure the problems causing the financial deterioration.

From the perspective of the rating agencies, the insured book of business is very important. They really analyze very carefully each and every new transaction that the financial guarantee companies are insuring, both for standards of capital adequacy and underwriting quality. This business as any other turns on the overall quality of the underwriting standards used.

The ownership structure is also important. We call ourselves a monoline industry; that is, the municipal bond guarantors are monoline in terms of their primary business. They underwrite taxable and tax-exempt state, county and municipal debt. They don't do corporate debt, they don't do rocket science, they don't do a lot of other things. In particular they are not property-casualty companies. The same is true for corporate guarantors who insure corporate-related transactions.

The rating agencies like to see deep pocket institutional investors, at least, at this stage in the industry's history. They like to see some public ownership but they feel a greater comfort with majority control in the hands of major financial service companies such as the Aetna's and the Firemen's Funds and other very worthy investors that are also competitors. They like to see those deep pockets so that in the event something happens there might be some additional support coming from the owners even though they're not under any legal obligation to do so as equity investors.

The investment portfolio is very important. The rating agencies really want to know what we are doing with the premiums that we take in. Are we buying junk bonds or how are we investing it? Typically, the municipal bond financial guarantors manage their assets very conservatively. They're primarily in Double-A to Triple-A quality, state, county and local government tax-exempt bonds (because they don't need taxable income at the moment) and in U.S. Treasury obligations with a duration of five to six years. We like to keep our money relatively "close to the beach" and in high-grade securities.

Of course, the rating agencies look for management experience and ability in municipal bond credit analysis, underwriting, investment banking and legal matters. Do they have the overall ability to come around and cure prospective problems as they occur on a regular basis or are they stuck with the risk that they have? As mentioned, we have a lot of flexibility to cure prospective problems, putting together teams of people to do workouts or to provide for other kinds of creative arrangements with issuers.

And, lastly, reinsurance. What kinds of reinsurance are available? Does each financial guarantee company swallow all of the risk that it underwrites or does it lay it off to reinsurance? I'll get into the specific reinsurance arrangements a little later, but most of the direct writers use both a mix of their own capital and the capital of reinsurance companies very prudently.

Now I'd like to talk about pricing the guarantee. How do we price a financial guarantee for a state or local bond? How do we do it for a corporate bond? Essentially all financial guarantee companies use the same type of analytical approach toward premium setting. The first consideration is the market spread.

That is, the typical BAA or A-1 rated bond offered uninsured is priced against how it would trade on an insured basis. You can't really charge a premium greater than the market spread because you won't have a customer for it.

The question here is what type of bond is it? Is it a nuclear revenue bond or is it a general obligation bond? It's a pretty important question and, generally speaking, premium rates are related to risk with safer bond types receiving lower premium rates than the higher categories of risk.

Who is the issuer? Is it a bond of the State of Rhode Island or the Commonwealth of Massachusetts or is it a bond of the Puerto Rico Highway Authority? What is the credit of the issuer? Do they have a credit rating on their own? Typically, most of the bonds that MBIA, FGIC and AMBAC insure are probably in the broad range of BAA to A-1 raw credit quality. That is, they're an intermediate and upper intermediate grade security.

As far as the security is concerned we need to know the nature of the underlying obligation of the issuer to pay. What is the source of the stream of revenue pledged to pay the obligation? We need to factor in the return on capital using different premium scenarios not only to get an adequate return for our own shareholders but also to meet the capital allocation requirements of Moody's and S&P to maintain the ongoing Triple-A/Triple-A rating assignment.

Competitive pressures, of course, factor into the pricing equation. Our industry faces a lot of competitive pressure; we price against FGIC, BIG, and Capital Guaranty every day in the market. We see probably five or six or eight different competitive issues going on around the country every day. We're pricing secondary market issues that are traded by different municipal bond dealers such as Merrill-Lynch, Paine-Webber, Pru-Bache, Shearson and Goldman-Sachs, all around the country every day from both their national and regional trading desks. So, there is strong competitive market pressure and we have to sharpen our pencils accordingly.

And lastly, the financial guarantee company's own internal underwriting opinion of the credit quality must be factored into the premium rate. Typically speaking, the resulting premiums generally range anywhere from 3/10 of 1% to upwards of 1.25% of total principal and interest to maturity. It will depend on all of those factors that I've discussed earlier, but again, they must all meet our own internal financial guidelines relative to return on capital.

I'd like to return now to the topic of reinsurance. All financial guarantors, as I mentioned, utilize one or more of the following types of reinsurance: quota share, surplus share, facilitative and excess-of-loss or stop-loss. All of these are used interchangeably at one time or another by all of the financial guarantee companies.

For those of you who may not be familiar with it, very briefly, quota share reinsurance is where a primary insurer reinsures a proportionate share of the liability on each policy written. For example, 5% of the risk written for 5% of the premium ceded to the reinsurer on a predetermined maximum amount per issue. Surplus share reinsurance is somewhat similar to quota share except that percentage amounts ceded to reinsurers will vary from policy to policy.

The above types of reinsurance are really written under treaty and cover broad groups of policies or all of an insurer's policies of a particular type. There are also pro rata types of reinsurance where the primary insurer and the reinsurer share proportionally in all premiums and losses according to agreed upon percentages under private agreements.

In contrast, facultative reinsurance is negotiated on an issue-by-issue basis for certain large transactions, particularly those of $200 to $300 million or more. We use facultative reinsurance very frequently in this industry. It augments the capacity provided by our own capital base. When we can't swallow the whale in one bite ourselves due to regulatory single risk limits or we're subjected to our own self-imposed in-house limits on how much we can write, we look for company on the part of reinsurers and others to participate with us in the risk.

And of course with excess-of-loss reinsurance the reinsurer will indemnify the primary company against the amount of loss in excess of its retention up to a pre-set limit. This type of reinsurance is designed to offer extraordinary protection to policyholder's surplus in the event of catastrophic losses and operates much like a revolving line of credit: as reinsurers receive salvage, amounts available under such treaties are replenished.

If any of MBIA's reinsurers become insolvent, ultimately, the liability reverts back to MBIA. You can't wash your hands of it. You are the company on the policy and the investor who holds the defaulted bond will naturally look to you and to your company first in the event of a default. Because reinsurance agreements really are private agreements between reinsurance companies and the primary writer, we have to make sure that the people who write our reinsurance treaties have the ability to pay their claims should any be presented to them.

As far as MBIA is concerned, we have used quota share for many years. That is, 10% of each state, county and local issue was automatically reinsured and the premium ceded to a reinsurance company less a ceding commission. As far as surplus share, we have flexibility to reinsure up to 75% of each issue and in MBIA's case, we layer our insurance arrangements so that MBIA retains the first $75 million of exposure on say, the State of Connecticut kind of credit. The next $75 million of exposure is picked up by the surplus share treaty. MBIA takes the next $25 million between $150 and $175 million, and on top of that, exposure above $175 million is ceded on a facultative arrangement.

Facultative reinsurance, as I mentioned, is negotiated on an issue-by-issue basis for transactions of large size and it really depends on the reinsurer's appetite. If, for example, there is a $200 million Commonwealth of Pennsylvania issue, and we feel like our appetite is only perhaps $125 or $150 million, we'll have discussions with Dan Gross and his company to find out whether they have an appetite for doing $50 million of reinsurance with us. Again, these are arm's length, private negotiations that we utilize frequently in this business.

I'd like to speak specifically now about the Municipal Bond Investors Assurance Corporation or MBIA because I have an in-depth knowledge of my own company. But as I discuss my own company here I'm also really talking about our competition because we're somewhat similarly structured.

Our Capitalization as of June 30 is $495 million of equity and Aetna, Firemen's Fund, CIGNA and Continental are our major institutional investors; 15% of our stock was sold last year in an initial public offering (CIPO) and is in the hands of the public at the present time. The IPO consisted of $5.50 million of common stock, with $4.50 million offered domestically and $1 million internationally to enhance MBIA name recognition as we see the prospect for future taxable municipal financings sold overseas.

As far as our book of risk is concerned, it is probably slightly more conservative relative to our competitors and I mean no disparagement when I say that. It is just that we began earlier in the 1970s when there were not as many very complex structured revenue bond transactions as there are now. A lot of the book that we wrote then were also general obligation, full faith and credit-backed municipal bonds. This category currently comprises 33% of our portfolio.

Our next largest category at 16% of the portfolio is in water, sewer and electric issues provided by municipal utilities that have basically a monopoly service capability within their areas. These are typically the two safest types of bonds and comprise roughly 50% of MBIA's book.

We also try to stick to the top tier of hospital credits, that is, if you layer all hospital credits into threes, we stay in the top third in terms of the market as we see it. That area currently comprises another 18% of our business.

Single family mortgage revenue and multi-family mortgage revenue bonds, particularly those issued by state housing agencies, constitute about 12% of our book of risk. Special revenues, including colleges and universities, ports, toll roads, airports, etc., make up about 8%. Tax-backed revenue, special assessments and limited taxes make up about 9% and all other types of state, county and local bonds about 4%.

As far as our risk portfolio by credit quality is concerned, more than two-thirds of it is rated upper medium grade (A/A or A-1/A+) by either or both of the rating agencies. About 27.50% is in the low A or medium grade category; 2.8% is in the highest and best quality, that is, Double-A and Triple-A rated and are principally bonds included in MBIA-insured unit investment trusts; and only about 1% is rated below Triple-B or investment grade.

As for geographic diversity by state, every financial guarantee company in the industry aims for as broad a diversification as they can get across the 50 states. Of course some states such as North Dakota, Iowa, Maine, Vermont and New Hampshire obviously don't issue very many bonds and therefore our portfolio as well as those of the other financial guarantors is relatively light with respect to exposure in such states. Other states such as New York, Pennsylvania, Florida, Texas and California, the more urban states and those attempting to meet infrastructure needs accompanying rapid growth, are likely to have their debt hitting the market more frequently and therefore we're more likely to insure them. MBIA and its predecessor the Municipal Bond Insurance Association, when we were a joint underwriting association, have now insured over 10,000 bond and note issues across the United States.

MBIA's commitment is the same on its policy as the other financial guarantee companies, both municipal and corporate. That is, the nature of the policy is permanent, unconditional, irrevocable and payments are available within one business day of notice of a default.

As far as surveillance and monitoring activities, we have a staff of about 23 professionals and support staff that do nothing but surveil the outstanding book. They review every credit at least once every four years, more typically every two to three years but much more often as necessary for issues experiencing temporary problems. There is a very proactive effort on the part of our staff, our outside counsel, our in-house counsel as well as the rating agencies and issuers themselves, to prevent defaults before they take place. Since MBIA was organized in 1974, we have not had one municipal bond default. Will we have one in the future? I think it's possible -- the laws of large numbers sooner or later will come home -- but we feel that we are in a much better position now to cure a default or to minimize the impact of one on our financial statements if it were to take place. Municipal credit defaults do happen all the time, they're part of our existence and as I mentioned, we're coming off seven good years. We don't know what the next seven years or beyond are going to bring. There will be future defaults, you can be assured of it, and that fact is what creates demand for municipal bond insurance.

The last thing I want to talk about is the secondary market. All financial guarantee companies are getting involved in the secondary market. FSA is very active in the corporate bond guarantee market, and MBIA, FGIC, AMBAC and BIG, in particular, are very active in the municipal market which has over $737 billion in outstanding bonds owned by institutional and retail investors. These issues are constantly being traded and retraded, and, as they trade, there is oftentimes a need for a financial guarantee. We're active in that area. We estimate that nearly $200 to $400 billion of the outstanding amount of state, county and municipal debt, at the moment, is insurable and, frankly, that amount is growing every day and every year. We see considerable opportunities in the future to get involved in that.

MR. DANIEL J. GROSS: Peter has talked about municipal bond insurance and the monolines. With five companies writing only one line, that's a business which is easy to define and compile statistics about. I'll be talking about guarantees written by multilines and corporate insurers which are much harder to follow. On the annual statement, this line is buried in the surety results so it's impossible to compile premium statistics.

In addition, the definition of policies in the line can be unclear. Thus estimates of premium are diverse because the line is not confined and narrow.

We estimate 1986 financial guarantee premium for multilines at $225 million. Of this amount, $85 million came from insurance of obligations backed by commercial mortgages, $50 million on insurance of receivable-backed obligations, $25 million each from insurance of commercial paper and of industrial revenue bonds and $20 million each from guarantees of investor notes and municipal leases. Since 1986 the market has probably contracted somewhat.

I'd like to focus on the two largest areas, commercial mortgages and receivable-backed obligations, to describe the products and how they're underwritten.

Receivable-backed obligations are generally packages of relatively small loans, put together and sold as securities backed by the receivables. Insured obligations have been backed by car loans, credit card loans and installment sales and boat loans.

The typical maturity of the these obligations is one to seven years and they're fully amortized which means that the debt is paid down over time. The premium is typically 35 to 100 basis points on par, paid annually. This is an important point: in this business premiums are very, very low. Although 35 basis points annually on par is larger than the typical premium on municipal obligations, it's a very low premium for a property-casualty risk. For comparison, property-casualty premiums generally start at 2% of the risk and go up from there. To charge such a low premium, you have to use "no loss underwriting" where there is almost no probability of loss or where a loss is a very unusual occurrence. Underwriting, as Peter mentioned, is the key to this business.

The structure creating a receivable-backed obligation starts with a financial institution holding receivables as assets. The financial institution sells the receivables to a single purpose corporation which pays for the receivables in cash. The single purpose corporation then issues debt to bond holders and gets the cash to pay the parent. The single purpose corporation creates a structure to protect the bond holders against the bankruptcy or insolvency of the financial institution. This structure also removes the receivables from the books of the financial institution.

The financial institution thus receives two benefits. If the financial institution is a medium grade Savings and Loan, its cost of raising debt might be very high. If it can properly package some receivables, they can be marketed, even without insurance, at a very high credit rating so that the institution pays a lower interest rate for funds. Secondly, by removing the assets from the balance sheet, the institution lowers its total assets so that it improves its financial ratios. As a result it doesn't need as much equity capital -- a very important point these days for many financial institutions.

There are two major risks in underwriting this product. One risk is that of a financial shortfall -- that the receivables may fail to generate sufficient cash flow to pay the bond interest and principal repayments as they become due. The second risk is that of the bankruptcy of the originator.

We protect against financial shortfall by requiring over-collateralization which can be created in two ways. First, a greater outstanding principal is normally required on the receivables than on the debt backed by them. Second, the receivables will be charging a much higher interest rate than the Triple-A debt they support. For example, you might have 107% over-collateralization on principal, but 120% over-collateralization in terms of total cash flow.

Any insurer subjects this anticipated income to what is called a stress test. For example, we start by assuming historical default ratios will double for the next two years and that two years from now there will be a depression with ratios rising to four times their historic rates for two more years. Interestingly enough, in the financial insurance business, this approach is called "actuarial." It will be very familiar to most of you, it's similar to most of our projections except that instead of using mortality or health claims we use default rates. If the issue can pass that kind of severe stress test, which seems to be the worst possible, then we consider it insurable.

As for the potential bankruptcy of the originator, essentially, that's a question of legal structure. All the primaries use bond counsel, internal counsel, underwriters and analysts who have been trained at a rating agency to review the documents and insure that the receivables underlying the bonds cannot disappear in case the primary originator becomes insolvent.

This is a large market and we think it's growing. As Peter indicated, Capital Guaranty and FSA are two relatively young primary companies that are both growing in this area.

The other major kind of obligation backed by financial guarantees written by multilines are real estate mortgages. These can be practically any type: multifamily housing, office buildings, shopping centers, factories or warehouses. Generally the security is a first mortgage on the property with a maturity of 10 to 12 years. Unfortunately, for those of us who have to worry about the guarantee, these usually don't have a 10- to 12-year amortization but generally use a 25-year amortization schedule. This means that at the time of the maturity of the security that's being guaranteed, there is something of a bullet payment remaining on the underlying mortgage. I'll be discussing this risk later.

There are two premium structures for this guarantee depending on the type of issuer. When the multilines sell this business, a typical single premium would be at 5-8% of the par value of the bond. Now, that's a very healthy premium, getting into the property-casualty area, but it's also a healthy risk. The monolines generally issue this coverage at a premium of 37.50 to 70 basis points annually on par. That, as I mentioned before, is a very low premium compared to the property-casualty-like premium charged by the multilines. What it means is that the monolines have to be much more careful on their underwriting because with such a low premium, they can't afford much possibility of a claim.

Underwriting this risk is always the most important factor when considering real estate. The analysis of real estate projects done by the primaries who specialize in this coverage is similar to what many of you would find in your own investment departments on the mortgage loan or on the real estate side. This involves thorough analysis of the project, market studies, location, tenants, project manager and so on, with site visits and extensive work done to determine the viability of the project.

In addition, it's my belief and one which is generally shared in the industry, that while an insurer can take the risk on a completed and rented project (assuming that they've done a thorough analysis of the viability of the area), the insurer should not be taking construction or rent-up risk. Typically this is a risk which the monolines won't touch. The multilines do take this risk and attempt to limit it through developer guarantees, but the question remains as to the quality of those guarantees. If a developer guarantees that he'll make you whole until the project is 90% leased or until the project is covering its interest at a certain ratio, you have to consider how good that guarantee is if the developer has fifty projects he's developing around the country and you know he may have the equity to support only five of these if they get into trouble. We try to avoid these risks, but this is an area where you're really in the insurance business and take a very real risk.

The other major risk in this area is that at the end of the deal, unlike a receivables-backed bond or many municipal obligations, you won't have the bonds fully amortized. If you guaranteed a $50 million bond, for example, at maturity after 10 years you may still have $30 or $35 million unpaid. Obviously, if there is inflation, you are safe. But if in the year the bond becomes due you're in a 20% interest rate environment and nobody wants to buy real estate, or they want to buy it at a very low price, then the financial guarantor is on the hook. This may be only temporary because sooner or later real estate should return to a more standard valuation, but the financial guarantor still has to make a big payment. The way to protect against this is in the documentation. The guarantor should insist that, well in advance of the final repayment, the borrower have some kind of takeout -- in other words, sell the property or have it refinanced. And if the borrower doesn't do that within a certain amount of time in advance of maturity, the guarantor has the right to take over the property and start working on the refinancing. The guarantor doesn't want to be surprised at the last minute.

I'd like to end with two general comments. First, as I've mentioned, the monolines write to a "zero loss" underwriting. It's not that we never expect losses but if we can smell a loss, sense a loss, or think there is a possibility of a loss, we avoid the risk. This contrasts with the property-casualty underwriting of the multilines who charge a premium three to four times as large as that of the monolines in return for taking a property-casualty type risk. Over time, you would expect them to have losses.

The second comment I'd like to make is about non-municipal business. We expect this to be a burgeoning business, full of new product development. We've recently seen two leveraged buy outs where some of the assets were securitized with guarantees that, in effect, allow the acquisitions to be financed with Triple-A debt. We believe we will be seeing more of these creative new products in this area and we believe that this will continue to be an interesting business in the future.

MR. ROBERT P. JACOBSON: I think it's helpful at this point to understand some of the special accounting rules that apply to financial guarantee insurance companies. Although there are some similarities, they are a bit different from the rules that apply to life insurance companies and property-casualty companies. Therefore, what I'd like to do is to discuss the principal difference under both statutory accounting and GAAP.

Let me start with a general description of the differing objectives of statutory accounting and GAAP. Statutory accounting is solvency oriented. That's really all the regulators care about. Is the insurance company solvent? Can they pay policyholders' claims? GAAP, on the other hand, is geared towards the matching of revenues and expenses and the proper evaluation of assets and liabilities.

One area where statutory accounting and GAAP are unique for financial guarantee insurers is revenue recognition. For statutory purposes premiums are recognized as earned when the debt service is paid off and not until then. For statutory purposes then every time there is a debt service payment, a pro rata portion of the premium is earned. For GAAP, on the other hand, premiums are earned over the term of the principal payments. If the first principal payment is two years out, then the premium related to that payment will be earned over that two-year period for GAAP, whereas for statutory purposes some premium will have been earned when interest payments are made and additional premium related to principal will be earned at the end of a two-year period.

I'll mention that there's been some discussion with regard to GAAP revenue recognition as to whether what's being done currently makes sense. Right now, what's being done is a result of the FASB's Emerging Issues Task Force having reached a consensus to recognize it over the term of the policy. The SEC has adopted that consensus in Staff Accounting Bulletin No. 60. The Association of Financial Guarantee Insurers (AFGI), the trade association for the industry, has formed a study group to evaluate the accounting standards and one of the things they're going to be looking into is revenue recognition, so that may change, but right now, that's how it's being done.

The basic concept of acquisition costs is not much different from that of property-casualty companies or life companies; commissions, premium taxes, costs of the underwriting department, payroll and overhead, marketing costs and rating agency fees. Another relatively significant acquisition cost of financial guarantee companies and reinsurers is rating agency fees. S&P fees are on an issue-by-issue basis and are a one-time up-front fee. Moody's fees, on the other hand, are comprised of both an up-front fee and an annual fee. In general, statutory acquisition costs are expensed as incurred, again, just as for any other kind of insurance; for GAAP, they're deferred except for the subsequent annual fees paid to Moody's.

As for loss reserves, there really hasn't, as yet, been a significant level of defaults and most of the major players have not had any defaults or losses in their history. There are no statutory rules right now in most states to prescribe what to do in the event of a loss. For GAAP, there are only general rules for accruing loss contingencies. Currently in those companies that do have losses, a case-by-case evaluation is done where a default or loss is probable and a certain amount of the debt service, usually at present value, is being set up as a case reserve. How much of that debt service really depends on the circumstances. In most cases, it's been a minimum of three years' debt service with the anticipation that there will be a cure within that three-year period. If, on the other hand, the facts and circumstances of any particular case make the probability of cure unlikely, the full amount of the debt service at present value should be setup as a case reserve rather than just two or three years' debt service accrual.

I'm aware of one major company accruing the equivalent of an IBNR, or incurred but not reported, reserve. It's a difficult issue because it's very difficult to demonstrate actuarially with your own experience that you will have losses. As Peter said, is it possible that there is a loss out there even though we've never had one? It's possible, it might even be probable, but how do you quantify it if you've never had a loss? It's not like a life insurance product where you know people are going to die. It's not like a property-casualty product where you know there are going to be automobile accidents, fires, or other types of casualties and you can estimate them based on your past experience. Again, actuarially it's much more difficult with this product. What has been the history of municipal bond or other kinds of credit defaults over the last 10, 20, 50, 100 or 200 years? It hasn't been that great and to the extent there has been a history, to the extent there have been defaults in the various kinds of issues now being insured, is that experience still relevant to the issues as they are now being underwritten? Consider, for example, a municipal bond default of 30 or 40 years ago. Would a policy on that issue have been written under today's underwriting standards? These are very difficult questions.

Some of the insurers are attempting to do an economic analysis of this. It's really a combination of economic and actuarial analyses to evaluate the likelihood of default given various economic scenarios such as depression, recession, high inflation, etc., and to estimate when those economic cycles will happen. I don't know if that's easier said than done. I don't think it's all that easy to do but I suppose it's possible to use that type of study to project against a company's active outstanding book of business and set up some type of IBNR reserve.

Income tax differences between statutory accounting and GAAP, again, are the same as for any other insurance company. For statutory accounting, only taxes currently payable are provided; for GAAP, deferred income taxes are accrued based on the existing rules. One unique aspect that relates to financial guarantee companies and taxes is something called a "Tax and Loss" bond. As an accommodation to the industry about 15 years ago, the IRS and the insurance commissioners agreed that financial guarantee insurers could deduct a contingency reserve, basically a statutory formula reserve, on their tax return even though it was not a fixed and determinable loss as is ordinarily necessary to get a tax deduction. It could be deducted on the tax return, however, only if the tax savings from the deduction were invested in Tax and Loss bonds, which are no-yield government bonds. What's the economic benefit of investing in Tax and Loss bonds as opposed to paying a tax? None. Why is it done? The reason is that Tax and Loss bonds are considered admitted assets for statutory purposes so that the contingency reserve is a strain on surplus only to the extent of its after-tax affect. That's the sole reason Tax and Loss bonds were written into the code although there are certain circumstances, for example, in an operating loss carry forward position, where you can get an economic benefit from them, but I don't want to get into that level of detail here.

Peter touched on capital adequacy before. It's important to the regulators and the rating agencies and it should also be important to buyers of financial guarantee products. It's important to note here that it's statutory driven. That is, not only do the regulators use statutory rules in evaluating capital adequacy but the rating agencies do so as well. Included in the capital base for measuring leverage are statutory capital and surplus plus the contingency reserve, the unearned premium reserve, soft capital in terms of letters of credit and standby agreements from shareholders, etc., all of which are viewed as being available to pay claims.

I alluded to the contingency reserve. Right now, New York Regulation 61, which has been around for about 15 years, requires that 50% of earned premium be set aside in a contingency reserve. The problem with the New York regulation is that the premium is earned on a statutory basis as the debt service is paid off and as the risk expires so that the regulation really calls for you to set up a contingency reserve after the risk is gone. I don't think this can be said to exhibit the proper relationship between the reserve, if you accept the need for it, and the methodology with which it's established.

California and Florida have just passed new laws. New York has a new bill, the NAIC has put out a model act and the trade association, AFGI, has put out its own version of a model act. They're all very similar. While there are some differences, I think the biggest change between all of these laws, bills and model acts and New York's current Regulation 61 is that they relate the contingency reserve to written rather than earned premium and to the credit characteristics of the different types of bonds.

In other words, the contingency reserve charge under all of these bills, acts and laws is based more on outstanding exposure and will be different for general obligation bonds and monopolistic, essential service bonds, etc., as opposed to certain types of special revenue bonds or health care bonds. The greater the risk, the greater the charge for the contingency reserve. Similarly for leverage or capital adequacy purposes, the amount of capital that has to be maintained to support business under all these proposals is different depending on the risk inherent in the type of credit.

Two other things that would change under all of these laws, bills and model acts are the single risk limits and aggregate risk limits. These limits are designed to prevent concentration of risk and they vary between the various states. Essentially they call for an aggregate risk limit so that the aggregate of all average annual debt service for all bonds cannot exceed 10% of surplus. In other words, more than 10% can't become due in any one year. Then for any single revenue source, if more than one bond from the same revenue source is insured, it cannot exceed another percentage of capital or surplus ranging between 50% and 75% depending on which rule you're looking at. Again, most of the states do not have anything specific now geared towards evaluating the concentration of risk.

I'd like to leave you with one last question concerning the economics behind financial guarantee insurance. As Peter said in discussing pricing, the most important parameter involved is the spread between the natural rating and the Triple-A insured rating, the natural rating being what the bond would be rated without insurance, and the Triple-A what it would get if it is insured. Theoretically that yield is a function of the credit markets working properly to evaluate risk. If you accept that market evaluation, and I'm not sure you should, and you accept that the premium charged can, at most, be some portion of that spread, then there is a problem that the ultimate losses on the business are going to be greater than the premiums. How investment income factors into this and whether it's adequate to make up the difference is another question. On the other hand, if those markets are not operating properly and are placing too high a premium on the difference between a Triple-A and a Double-A natural rating, then this is a profitable product. Obviously, those people in the business believe the latter.

MR. GROSS: We will now open the session to questions or comments.

MR. DALE S. HAGSTROM: I'd just like to get a sense for the pattern of statutory earnings for the guarantee on a typical general obligation municipal bond. Is there a loss the first year followed by gains? Are there five years worth of losses? What magnitude of statutory strain are we talking about?

MR. JACOBSON: The statutory strain is only in the first year because the acquisition costs are expensed and will almost always exceed the premium. After that, the actual earnings pattern on a statutory basis depends on the debt service. It is pro rata to the debt service so that, if the issue calls for interest only for 20 years with a balloon payment for the full principal at the end of the 20 years, and if the total debt service, interest and principal, is double the principal, you'll earn 50% of the premium in even pieces, 2.50% a year for 20-years, with the final 50% of the premium earned in the last year. The contingency reserve under current rules is 50% of the earned premium and that's a totally variable cost. Again, the first year you are going to have a statutory strain because expenses exceed earned premium, but beyond that it really depends on the debt service schedule.

To give you some idea as to the cost of the business, MBIA and FGIC are both publicly held companies and file 10Ks so the expense ratios are public information. These may range anywhere from 25-35% or even 40% in any one year depending on volume. I won't call these expenses largely fixed but there is enough fixed expense involved that even if the volume were to grow or drop significantly, those ratios would not be likely to vary from that 25-40% range. The acquisition cost component is probably 50-70% of total expenses.

MR. GROSS: We don't pay commissions in this business, it's unusual in that regard, but we do have high underwriting expenses. As a reinsurer, we pay a ceding commission but statutory drain is still marginal. As a result, we think of return on capital invested as being the return on the capital S&P makes us allocate to a particular issue and not the classic actuarial return on the surplus allocated because of surplus strain.

MR. ROLAND A. DIETER: This is in the background of guarantee funds, with life insurance companies now getting ratings from the services. Has any thought been given to having entities similar to yourselves being set up solely to pay off annuity claims, life claims, health claims, etc., of companies that have gone insolvent, thus eliminating the burden of the well-managed companies to bail out the others by means of guarantee funds and moving this issue out of the government sector to the private?

MR. KELLY: I'm going to have to answer your question indirectly. As far as our new product lines are concerned we have people who are engaged full time in trying to develop new tax-exempt and taxable products and this is one of the questions that has been raised when some GIC providers fell on difficult times and people began to look to MBIA and to other financial guarantors to shore up their concerns. This is something that we do ordinarily review from time to time but we have not made any determination at this point that this is a line of business that would be appropriate for us.

I would say that as corporate financial guarantors look at new product lines, they would carefully weigh the risk-rewards of providing financial guarantees for those life companies where they saw (a) viability over a period of time and (b) a loss dimension that they felt that they could live with relative to the premium. In that regard, I'll say again that basically our standards are very tight. People used to say about MBIA and the other financial guarantors that we only insure bonds that don't need insurance. That is, we work on the basis of high quality, no loss underwriting and I don't see our risk profile changing that much. For that reason I don't think that this is a business that very many of us would take on. At the moment, I don't know anyone who is actively in that as a business.

MR. GROSS: In reference to your question I should note that we have frequently been asked to approve lists of people offering GIC contracts and we do have approved lists of them. I'd also agree with Peter that the credit standards are such that I don't think we could provide much protection to the life insurance industry because we would only be offering insurance on those for whom we felt there was very, very little possibility of loss. So I'd still keep money in the back pocket for the insolvency funds and the guarantee funds.

MR. TIMOTHY J. ADAMS: Mr. Kelly, during your presentation there was an indication of MBIA's geographic distribution of business. I have two brief questions on that: First of all, you alluded to some business just west of Alaska and Hawaii and I was wondering what that is.

MR. KELLY: If I'm not mistaken, I think it's probably Federal Housing Administration (FHA)-insured municipal transactions in the Marianas. I believe we have one or two remote transactions in the U.S. territories.

MR. ADAMS: I also noticed that Alaska seemed to have a relatively high amount of business written. How did MBIA get so much business in one of the nation's least populous states?

MR. KELLY: I can't recall exactly what the exposure to Alaska is but I do know that it's a relatively small amount vis-a-vis other states in the United States and they're mostly state related, state housing agency or full faith and credit-backed municipal obligations in Alaska.

MR. GROSS: Actually, as this illustrates, for a life actuary this is a fascinating business. It's not like the property-casualty business in that the underwriting involves looking at all the states and seeing how they're financed. You may recall that Alaska had enormous amounts of financing related to construction in the oil industry and ancillary services. This created a disproportionate share of bond issuance in Alaska compared to other states.

MR. SCOTT H. DELONG, III: One of my jobs is to maintain what we call a target surplus formula for my company. I was wondering if the highly detailed formulae varying by type of guarantee that you mentioned as being used by S&P and Moody's are available to the public. I would imagine you probably have very good knowledge of those formulae and how they function.

MR. KELLY: S&P and Moody's have both issued in their general publications a fairly detailed description of how they rate and analyze financial guarantee companies. The background for my talk consisted of a series of discussions that I had with our own people who work on the regulatory side of the business and it's based upon both oral and written correspondence that they received from the rating agencies in that connection.

MR. JACOBSON: You could also get close by using the formulae that are in the NAIC or AFGI model act, the Florida law or the New York bill. It's the equivalent of capital charge formulae for each type of bond. There are also some rules in at least one of those documents, as they related to multiline companies, with regard to the maximum amount of financial guarantee insurance you can do and the maximum amount of the surplus of the multiline company that can be allocated to the financial guarantee business.

MR. GROSS: I have two comments. First, a little history as to why we're evaluated in this strange way. It's a matter of chicken and egg. In order to write this business you need a Triple-A rating but S&P requires that you have a five-year operating history for a Triple-A rating. Therefore, none of us could have enough of an operating history to ever get a Triple-A rating. Before MBIA was formed, the Aetna, Travelers and so on were guaranteeing these bonds and they were not subject to these tests. So, in essence, these tests were a substitute for new companies.

Secondly, as to the tests themselves, S&P makes you go through an elaborate depression scenario. They tell you what the interest rates will be. They tell you there will be no defaults for four years and after four years, they tell you exactly the day the recession will start and exactly the day it will end and the amount of defaults. Obviously, we all work closely with them and run models and they check them. They give you a projection of anticipated defaults in a depression and that really determines the amount of surplus you need. I think if you read what they've published you can construct your own formulae and you probably will be able to do it close enough.

PANEL DISCUSSION

MR. CHRIS G. SICARAS: For issues traded in the secondary market, could you give an example of a transaction that would lead to insurance and who would pay the premium in such a circumstance?

MR. KELLY: I'd be happy to. Typically what would happen is that a municipal bond trader, say Merrill-Lynch in Dallas, would call us about a block of $1 million, Harris County Flood Control District Bonds, say, sevens of March 1, 1999. They would know the bid and offered side of the market on that block of bonds on an uninsured basis and, based upon their own experience, they could factor in where they thought the bid and offered side would be on an otherwise similar MBIA-insured Houston Flood Control District Bond. This would form an outside limit for the premium computation to which we would factor in the cost of any associated secondary market transactions, including custodian fees for any bonds that are partial maturities or partial issues requiring book entry trading which are immobilized at U.S. Trust and DTC. Those fees are added to the various risk components I discussed earlier in my presentation. We then compute the total principal and interest to maturity, determine a premium and come up with the total dollars per bond and the total dollars for the trade to insure that block of bonds. We then call the trader back with the all-in-costs for the premium and other related fees and let the trader determine whether to purchase insurance.

If the insurance is purchased, we then get a new Committee on Uniform Security Identification Procedures (CUSIP) number to separately identify that block of bonds on the books of the *Cusip* Bureau as MBIA-insured and we make all the arrangements with U.S. Trust Company and DTC for the bonds to be delivered into U.S. Trust and DTC and immobilized. We then send confirmations to the dealer or the dealer bank to confirm that MBIA has qualified that bond for insurance so that, at settlement, upon payment of the premium, the bonds will be traded as insured bonds. They're recorded on our books, on the books of U.S. Trust and DTC and on the books of the *Cusip* Bureau permanently as MBIA-insured. The rating agencies are also informed of the fact that MBIA has insured that block of bonds. Within five business days, that is, regular settlement, the premium and related fees are paid, the bonds are delivered into the U.S. Trust and DTC and the insurance documentation is completed for the dealer.

MR. SICARAS: One other question I had is that, assuming something approaching no loss underwriting is possible on municipal bond issues, what does that say about the underwriting performed by the financial guarantee institutions as compared to the analyses performed by the bond rating agencies?

MR. GROSS: I think we and the bond rating agencies are both very, very thorough, but as one of our analysts said in comparing ourselves to the ratings agencies, we can't downgrade a bond, which means we have to be more careful about the initial rating. While the rating agencies would never knowingly put investors at risk, we're on the hook financially for large amounts for a long, long time and this shows in our very conservative underwriting history.

MR. KELLY: The rating agencies are pretty careful because, obviously, they don't want to get involved in a situation where they upgrade a credit and then six months later have to downgrade it. It does happen, although rarely, and when it does it calls into question the veracity of the rating agency.

Well, obviously, the rating agencies are conservatively managed and they don't make rating moves unless it's really clear that a rating should change upward or downward. They don't do anticipatory rating changes.

As far as the financial guarantee companies are concerned, it's been my experience that MBIA turns down half or more of all the applications that we receive for insurance. It may well be that a good many of the credits that MBIA turns down are indeed going to be money good and will pay debt service as scheduled. As far as no loss underwriting is concerned, it's a fairly tough standard. It allows some flexibility but, again, in the parlance of the industry, if an underwriter has a feeling that there is a reasonable risk that a claim might be made, that's the kind of business we will simply avoid. The in-house rules are that we're careful because, given the market forces at work in the monoline municipal bond insurance business, the margins are thin. It is really driven by quality underwriting. We've found that out for many years and it gets reinforced everyday.

MR. GROSS: I should say, in contrast to the life business or a general property-casualty business, the underwriting is reviewed at an extremely high level in all the primaries. It starts out with an initial screen by an underwriting analyst and is followed by a review by the underwriting department. After it passes that review, it goes to a second review by a group of senior officers frequently including the CEO. The bets are very large. It's not like writing a $30,000 life insurance policy where you can afford a mistake as part of the training of a junior underwriter. Everybody is very, very careful and spends a large amount of time on detailed study before accepting these credits.

MR. KELLY: You can never be sure of any credit that you are underwriting as any of you who have spent periods of your careers in underwriting realize, but given the kinds of operating standards that you're trying to adhere to in this business, you have to be pretty clear going in that's it's a money good situation. No one knows what the outcome may be in 20, 25 or 30 years on a bond with that kind of a term to maturity, so on a best efforts basis, you have to be pretty sure of your underwriting going in. This is not a business that allows a lot of flexibility to do some credit reaching. You can't do that in this business and survive. There is just not enough premium spread to allow us to take underwriting risks as an industry and I don't think that's going to change.