# RECORD, Volume 28, No. 1\*

Colorado Springs Spring Meeting May 30-31, 2002

#### **Session 7PD**

#### The FHLB Advance Window: A Compelling Opportunity?

Track: Investment

Moderator: ANSON J. "JAY" GLACY, JR.

Panelists: H.D. BARKETT†

ANSON J. "JAY" GLACY, JR. THOMAS M. GRONDIN

Summary: This session describes the general features of advance programs operated by various Federal Home Loan (FHL) Banks, summarizes potential benefits to insurers and identifies key issues surrounding the programs.

MR. ANSON J. "JAY" GLACY, JR.: I think we have a pretty good panel lined up for you today on the topic of the Federal Home Loan Banks (FHLB) advance programs. The panel today is intending to present an even-handed view of these programs and what they mean to insurance companies.

My name is Jay Glacy. I'm vice president and actuary with New England Asset Management, part of the greater Gen Re organization, which is in turn owned by Berkshire Hathaway Inc. Our company specializes in managing investments for insurance companies. Our insurance industry focus makes uncovering value ideas like FHLB advances key to the success of our clients. Today, I am lucky to have on the panel with me two experts in their fields.

After I do the overview of how advances work and discuss their value to insurance companies, I'm going to turn things over to H.D. Barkett. He is vice president in charge of national accounts and director of the Financial Strategies Group with the Home Loan Bank of Des Moines. He's been involved with the financial industry for

†Mr. H. D. Barkett, not a member of the sponsoring organizations, is director of national accounts at Federal Home Loan Bank in Des Moines, Iowa.

**Note:** The chart(s) referred to in the text can be found at the end of the manuscript.

<sup>\*</sup>Copyright © 2002 Society of Actuaries

almost 20 years. From 1985 to 1992 H.D. worked in numerous capacities with the Home Loan Bank of Dallas, first managing the trading desk, then as vice president of correspondent banking and finally heading up the Credit Strategies Division. He moved on to serve as the vice president of Institutional Fixed Income Sales with PaineWebber and then with Shay Financial, both as asset/liability consultant and manager, managing a large fixed income portfolio for numerous banks and thrifts. H.D. has been with the Des Moines Bank since 1999. He received his B.A. in psychology from the University of Arizona, Tucson. He also attended the Kellogg Graduate School of Management. H.D. is a member of the Financial Managers Society. H.D. will present the FHLB advance opportunity from the perspective of the Des Moines Bank.

Finally, Tom Grondin is chief actuary, Risk Management, with Aegon Institutional Markets, a division of Aegon USA. Tom has over nine years of experience in the insurance industry. Prior to joining Aegon in the year 2000, Tom worked as a consultant with Tillinghast. Before that he was the asset/liability (A/L) manager for a large block of business for a Canadian insurer. His areas of expertise include risk, derivative management, pricing, actuarial appraisals, mergers & acquisitions (M&A), demutualizations, long-term asset/liability modeling, Canadian/U.S. financial reporting and valuation requirements.

Tom was a member of the SOA Finance and Investment Research Committee from 1998 to 2000 and a member of the AAA Unified Valuation System (UVS) Numerical Subcommittee since 1999. He's currently a member of the AAA Liquidity Risk Working Group and also served three years on the Finance, Education, and Exam Committee. Tom was a member of the Professional Oversight Group for the Year 2000 Risk Position Report Survey, which he originated with a request for proposal (RFP) in 1999. He graduated with honors from the University of Windsor and furthered his studies in post-graduate work at the University of Western Ontario. He's a Fellow of the Society of Actuaries and the Canadian Institute of Actuaries and a member of the American Academy of Actuaries.

I'm going to cover things from an overview perspective to bring everybody up to speed on what this opportunity is, what the FHLB system is and how advances work. I'll give some perspective on their importance to the insurance industry and what issues insurers should think about as they look at this. Then, I'll turn it over to the panel for their perspectives.

The FHLB system was born in 1932 to support the residential mortgage industry by increasing the transparency and liquidity of the mortgage industry. Since that time the mandate of the FHLB system has grown until, collectively, the banks that are members of the system are now the third largest financial institution in the United States, after Fannie Mae and J.P. Morgan Chase. There are 12 regional FHLB banks that are privately owned, federally chartered government-sponsored enterprises (GSE) with specialized lending powers. The 12 banks are New York, Boston,

Chicago, Atlanta, San Francisco, Dallas, Indianapolis, Topeka, Des Moines, Cincinnati, Pittsburgh and Seattle.

What makes the banks so special is that they're exempt from SEC registration of their debt securities and from state and federal taxation. Banks issue consolidated debt obligations through their Office of Finance. These issues are joint and several obligations of all 12 banks. Many of you have those securities in your investment portfolios and are familiar with them.

The primary business of the banks is to extend low-cost loans, which the banks term "advances," to their member institutions and, in so doing, promote federal housing policy. At year end 2001 advances represented 68 percent of the combined FHLB system assets. Most of the remainder was in securities. And the average insurance company advance at the end of 2001 was about \$100 million. I looked at the stats at the end of March, 2002, and that number has grown to \$112 million. That's the average advance taken by an insurance company from their local FHLB bank.

Overall, the advance programs of the FHLB banks have numerous benefits. First, they are a ready source of liquidity. The ability of the banks to supply liquidity to their member institutions through advance programs performed well during the difficult week of September 11. None of those liquidity facilities were turned off at the banks. Second, advances are a low-cost source of funds that can reduce the overall cost of funds for an insurance company. For single premium deferred annuity (SPDA) writers in particular, advances represent a less finicky liability without the risk of disintermediation and the need to pay agents and brokers commissions.

Further, advances can be used via something called leverage trades, which I'll describe later, to grow the balance sheet. They can help you manage your interest-rate profile by selecting the appropriate structure of an advance and making sure that it integrates well with your existing asset and liability positions. And those leveraged trades that I mentioned can enhance your investment income by borrowing from your friendly local banker and then reinvesting the advance proceeds at a higher rate. Obviously that drops right down to the bottom line. And then finally, because the advances promote federal housing policy, participating in this program demonstrates good corporate citizenship.

That's in general. Now, insurance companies in particular FHLB advance programs can supplement or even replace existing liquidity facilities like commercial paper programs, repo programs or lines of credit. More importantly from my perspective is that the liquidity involved in FHLB advance programs can help you reduce your cash balances and be more fully invested in interest earning assets. These programs can increase investment flexibility. The liquidity can help you handle transient cash-flow dislocations such as many of us faced in the horrible week of Sept. 11 and following. They enable investment in less-liquid but higher-yielding

assets, like asset-backed securities, and improve your risk-based capital (RBC) position as well. And then finally, these programs can give you the ability to pick up some basis points by using advance liquidity to extend out on the yield curve further than you otherwise would.

Why are we talking about this program today? Well, there's been a good deal of growth in advance programs spurred by access by commercial banks in the past 10 years but more recently by insurance companies. That's a result of the provisions of the Gramm-Leach-Bliley Act, of 1999, which President Clinton signed before he left office, also known as the Financial Modernization Act (FMA). That act eased the ability of insurance companies to access advances. Finally, the bankers are very forthcoming in customizing flexible advance designs, such as term funding, convertible designs, or designs in which option content is embedded into the actual advance.

Chart 1 shows a growth in advances up to almost \$500 billion. This is growth in advances for the whole system. The average rate based on my trusty HP 12C was about 23.65 percent growth per year. The thing about this growth rate as compared to, say, a variable annuity (VA) growth rate is that the growth in VA assets includes the earnings on those assets and this doesn't. So there has been truly phenomenal performance in the advance programs.

On the insurance company side, participation has just started. At the end of March 2002, there were 33 active borrowers. They were members of their local banks who were actively taking advances. We're just at the inception of insurance companies accessing this tool. For comparison, 98 percent of the savings and loans are FHLB members, 80 percent of the commercial banks are FHLB members, and 60 percent of retail banks are FHLB members.

The eligible collateral that can be pledged by life insurance companies to take advances is \$1.3 trillion. And from my perspective, advances are especially well suited for insurers without gold-plated ratings, because the relative advantages to taking these low-cost loans are even greater for them.

So, if you want to avail yourself of this funding from the bank, what do you have to do? Well, the first thing you have to do is make an application for membership, and that has to be made at the statutory regulated entity level. So that means many of the insurance companies that have multiple statutory entities strewn around the United States would find themselves in many cases making multiple applications to multiple banks. The bankers will require you to demonstrate sound financial history and condition. These requirements differ with each bank. They may include requirements for profitability. They may include requirements for capital strength as well.

Finally, to become a member you need to purchase stock in your regional FHLB bank in the amount of one percent of the residential mortgages and mortgage-

backeds that sit on your balance sheet. So you add up the market value of that, divide it by 100, and that's how much common stock you need to purchase as your membership requirement in your local bank. That's usually a pretty big number, or for insurance companies can be. However, as a result of Gramm-Leach-Bliley, that one percent may be reduced significantly through an initiative called recapitalization of the 12 banks.

So, presuming you've made your application to the bank, and purchased the stock, now you're interested in availing yourselves of the low-cost loans. In other words, you have a need to take an advance for whatever purpose. What are the requirements for doing that? Well, first you need to purchase additional stock in the bank in the amount of five percent of the amount borrowed. Again, the Gramm-Leach-Bliley recapitalization rules and requirements that will be in effect in the next few years may reduce that number to as low as two percent. So, in the coming years that equity requirement will be less onerous than it is right now.

The qualifying collateral that you can use to pledge, or to borrow against, are residential mortgage loans, whole loans, securitized pass-throughs, mortgage-backed securities (MBSs), Treasury issues and commercial mortgage-backed securities as haircut by the individual banks. They do apply a haircut to these generally on the order of 85 or 90 percent. And the qualified collateral does vary across the 12 banks. So you want to talk to your banker about how that works for each bank. And then finally you'll need to pledge the collateral in an acceptable form of lien. Usually it's a blanket lien arrangement.

So, to become a member and to take an advance from the bank, you'll need to purchase some FHLB common stock and that common stock for insurance companies is shown as unaffiliated common stock on the statutory blue blank. Its characteristics are that it's non-marketable and only redeemable at par by the banks. Historical dividends have been between five and eight percent. So it's a pretty good investment on its own. Some of the banks pay cash dividends and others pay stock dividends. Again, this thing called recapitalization is going to create a new and hopefully more modern and permanent capital structure for the banks. That ultimately will result in Class A and Class B shares, with the actual common stock used to support the borrowing of five years in duration. In other words, you may need to hold it for at least five years.

Of the 33 life insurance companies that I mentioned that are taking advances right now, I think 28 of them show the advance as borrowed money on Line 22 in the blue blank on the liability side, and as such, there's no RBC charge applied against that line, unlike an SPDA, which has a pretty hefty RBC charge. The FHLB stock itself that you need to purchase for your membership and advances receives a sweetheart deal in terms of RBC charge. Right now it receives NAIC 1 preferred stock treatment of either 70 or 80 basis points, I'm not sure which, as opposed to the high RBC charge levied against common stock.

In total, advances compare favorably with annuities as a source of funds. They're more capital friendly. There's less threat of disintermediation. And there's good flexibility in how advances can be structured to fit and integrate with your existing assets and liabilities, your existing risk position, and the risk position that you want. I said 28 of those 33 companies have shown advances as borrowed monies on Line 22. The other five use funding agreements as the conduit for taking an advance, and those liabilities are shown as policyholder liabilities in the blue blank. And funding agreements have different RBC implications, as we know.

The Gramm-Leach-Billey Act, the thing that allowed insurance companies after 70 years to enjoy the same benefits that commercial and retail banks have, eliminated what's known as the qualified thrift lender (QTL) test. That had a number of restrictions in it that affected insurance companies. Primarily it restricted what the insurance companies could do with the advances that they took from the bank. Now, there's pretty much unlimited flexibility on the part of the insurance companies to reinvest or deploy those proceeds as they see fit. I've mentioned the recapitalization of the 12 banks a number of times as mandated by Gramm-Leach-Bliley and its intention is to produce a more permanent and modern capital structure resulting in two classes of stock, Class A and Class B. It may reduce the membership stock and activity stock depending on the particular way that each individual bank does its recapitalization. I think right now, of the 12 banks, only one has actually completed its recapitalization and that's the Bank of Seattle.

As I mentioned earlier, the FHLB banks enjoy some interesting advantages (that we wish insurance companies could have). Because they're authorized to carry out federal housing policy, they enjoy some subsidies. First and foremost they're exempt from the need to register their debt securities with the SEC, and they're exempt from state, local and federal taxation, although they are assessed a RefCorp charge of, I believe, 20 percent of earnings. Second, and equally important in terms of a subsidy, is that there's a perceived federal backing of their debt obligations. So very much in the way that we know how Fannie Mae and Freddie Mac operate, the same thing applies here. There's the perception of a federal backstop.

The Congressional Budget Office (CBO), about a year or two ago, did quite a detailed study trying to measure what the value of the GSE subsidy was and came up with some numbers. They're very controversial. There's not a lot of agreement as to what these numbers are and how they should be measured. But they found about 15 basis points of subsidy benefit at the short end of the curve and about 50 at the five-year point. I was able to find another analysis that calculated a 52-basis-point value of the subsidy value deriving from those two benefits. About 68 percent of that subsidy is in turn passed onto advance users, the people who borrow from the banks. That is a political issue. There are congressmen who watch over that closely. And, for those of you who read the *Wall Street Journal*, there is a quite a controversy about GSEs going on right now. It's led by Congressman Baker of Louisiana.

The *Wall Street Journal* has something to say about this as well. Their main targets are Fannie Mae and Freddie Mac, as you know if you've been reading the editorials. The FHLB system may bear some fallout somehow as it relates to this, but the thing to remember about the FHLB system and the banks is that they're not in the retail business. They're wholesale bankers. The main concerns of the controversy relate to the marketplace footprint. In other words, the FHLB bankers have competitive advantages that J.P. Morgan Chase does not have. There are also concerns over accountability and disclosure as well.

Recently, I went onto the Web and collected the aggregated financial reports of the 12 banks just to get an actuarial perspective on how they price their products. The advance pricing margins in 1998 were 26 basis points, in 1999 were 24 basis points, in 2000 were 22 basis points and in 2001 were 21 basis points. This is essentially that other 32 percent of the subsidy. I guess that is a good way to look at this. I'm not sure what the declining trend means, but it looks like it's leveling off a little bit. So the banks extract a margin between their assets and liabilities of about 20 basis points, and that's passed along to their shareholders.

Finally, I collected some pricing indications. The bank I looked at as of April 17 was the Bank of Des Moines. The indexed advance was equal to a three-month London Interbank Offered Rate (LIBOR) plus 13 basis points. The two-year advance was equal to the two-year Treasury rate plus 43 basis points and the five-year advance was equal to the five-year Treasury rate plus 60 basis points. I would note that in looking at the pricing of advances around the country, among the 12 banks, it seems to be pretty tight at the short end of the curve. So, something like LIBOR plus 10 to 15 is pretty common across the board, but when you get out into the term funding world there's a good diversity of pricing out there.

MR. H. D. BARKETT: The title of my portion of the presentation is "A Simple Alternative," and, honestly, that's what we are. The bank system is a very simple operation. There's not much to it. It is not a complex entity. You may find it interesting or surprising to know that insurance companies have had access to the FHLB system since its original charter by Congress in 1932. For 68 of those 70 years, however, there really was no serious development of that relationship. It really didn't have legs, as it were. We've had the two pieces of legislation that Jay mentioned, and I'm going to talk a little bit about both of those. In 1989 the Financial Institutions Reform Recovery and Enforcement Act of 1989 (FIRREA) was implemented and effectively expanded access to the system. It allowed for all federally insured depositories to become members. As we went on, GLB, implemented in 2000, had a much more significant impact on the insurance business. Frankly, prior to that legislation, our business with that industry did not show the kind of promise that it does today.

This legislation effectively changed the economic dynamic of FHLB membership for insurance companies. The changes include additional types of collateral availability

and equalization of the home loan bank stock leverage without regard to asset mix, and that's a big one. The changes also included a change in the capital structure.

As Jay said, there are 12 district banks. Ours is the eighth district, the Des Moines district. We cover all the resort states of the Dakotas, Iowa, Missouri and Minnesota. We asked for Hawaii. We didn't get it. That was actually in the original charter. Although there are 12 district banks and it is a system, the districts operate independently. They are each unique. They each have their own board of directors made up of, at a minimum, 14 member stockholders and appointed public interest directors. Each of the banks is directed by its board of directors within the constraints dictated by the Federal Housing Finance Board in Washington. Each of the banks has its own way of doing business, has its own philosophy, and has its own risk profile. Each bank has an internal audit department, is audited by an external auditing firm annually, and is examined annually by the Federal Housing Finance Board to assure its strict adherence to the financial management policy dictated by that housing board or by the finance board.

As I said, the system's been around since 1932. In the 70 years since its inception, the banks have never had a credit loss, nor have the banks ever forced repayment of an advance. I think that's something that probably most people don't know and is an extraordinary record. What this says is, effectively, advances are not volatile liabilities. These funds are there and available for legitimate purposes provided the member has adequate collateral and stock. Actually, even during the thrift crisis—we were formerly a thrift wholesale bank—the banks were able to work with our members and our members' regulators to meet the needs of the community, the institution, and the regulators. Even in situations involving liquidation, the banks were there to help spit out any transition or acquisition and, in fact, were there often at the request of the regulators.

As I said earlier, Gramm-Leach-Bliley is a significant piece of legislation for a couple of reasons. It certainly allowed greater flexibility for membership. The change in the leveraging of the bank stock is of special significance to the insurance industry. Prior to that legislation, the percentage of mortgage assets to total assets was the determining factor in how you were able to leverage home loan bank stock. The equalization of that to the 20-to-1 leverage ratio without regard to asset mix made membership for insurance companies much more attractive. Prior to Gramm-Leach-Bliley that leverage ratio could have been as little as 2-to-1. That 20-to-1 equalizes it and makes it the same for everyone. So for every dollar of stock you own, you could take down \$20 in advances.

In order to do business with us, you have to become a member, a stockholder. The membership process starts with the application. It's reviewed, approved, and at that point the new member purchases home loan bank stock. That stock is an earning asset. Depending on the individual home loan bank it may pay a cash dividend or a dividend in kind. The stock requirement is the greater of one percent of mortgage-related assets or five percent of advances. So, it's not in addition to

the one percent that you must retain as membership stock. The one percent of mortgage assets calculation includes one to four family mortgages and MBS pass-throughs, and excludes collateralized mortgage obligations (CMOs) and real estate mortgage investment conduits (REMICs).

To get started, certain agreements have to be in place—the custodial and collateral agreements. Haircuts are going to vary depending on the bank and type of collateral. Also, you set up a deposit account. That account earns a Fed fund's rate of interest without you having to do anything else. In the collateral process, collateral pledging varies by home loan bank. Each bank has a collateral pledging procedure. Those are available online. If you want to look them up, each bank has its own Web site. Ours is <a href="https://www.fhlbdm.com">www.fhlbdm.com</a>.

There are several types of collateral, including one to four family mortgage loans, multifamily loans, agency/non-agency MBSs, Treasury and agency securities, agency CMOs and REMICs, government guaranteed loans, cash, commercial mortgage-backed securities agriculture and commercial real estate, closed-end second mortgage loans and home equity lines of credit. Again, because we're all run independently, not all the banks will accept all of these types of collateral. We in Des Moines do.

Once you become a member accessing the funding is extraordinarily simple. You initiate a call to the money desk (800-544-3452, ext. 1013) and tell them how much money you want. We actually go out and price that. If you agree to the transaction, in most situations it can be settled the same day. At the Des Moines bank we are actually about to implement an Internet banking system that will allow you not only to view your transactions, your accounts, your collateral and stock, but also allow you to initiate some advance transactions over the Internet.

How much can you get? Our minimum in Des Moines is \$100,000. That's the minimum advance you can take down. Some of the banks have no minimum. On the maximum side there is effectively no maximum. The maximum is going to be based on the collateral, your collateral availability, the amount of stock you purchase to support that borrowing, and the institution's financial condition. But, effectively, we've not reached a maximum at this point.

Jay mentioned the events of September 11. I'm sure you all remember where you were on September. On that day when the unimaginable thing happened, when all of those disaster plans were tested, in the midst of those tragic events we were there to provide a stable source of funding for our members. We were there on that day just like we've been there every day for the last 70 years. When I left the office on September 10, we had an advance portfolio of about \$20 billion, but at the close of business on the 13<sup>th</sup> that advance portfolio was \$24 billion. Over those three days we funded an additional \$4 billion for our customers, even in the face of a market that was virtually nonexistent. So not only have we been there for our members, but we contend that our pricing remains very, very competitive.

The banks are individual. They're all going to price a little bit differently. They have some consistencies and some inconsistencies. We all issue debt notice consolidated obligations (CO). We typically swap that back to LIBOR. This can be done in a couple of different ways depending on the most efficient execution. In Des Moines we operate a \$36 billion institution with 160 employees. Because we have such low overhead we can and do operate on very thin margins. Some of the pricing you saw earlier, particularly from the Des Moines bank, was posted pricing. That doesn't include volume discounts and some of the other things that are available to you. Because we operate on those thin margins and have that low overhead, we are able to pass those savings onto our members.

Next I will discuss a little bit about products. First, we'll talk about the products that currently are favored by our insurance company members. These are funding agreements in a number of different structures, overnight fed funds advances, short-term fixed-rate repo advances, long-term fixed-rate advances and LIBOR advances. The overnight Fed funds advance is very simply that. It's an overnight advance. You can roll it as long as you want. It's very competitively priced, and there's no commitment. Short-term fixed-rate repo advances are essentially one week to six months with principal and interest at maturity and a fixed rate. The long-term fixed-rate advance is seven months to 20 years. Again, that one has interest monthly, principal at maturity and a pre-established, pre-set rate term. The LIBOR advance is just that, a floating rate advance. They are either one- or three-month, in our case.

There are some of the other products that we may want to take a look at. The first one is the mortgage-matched advance, which is a fixed-rate amortizing advance that has a five-year lockout. After that five-year period, the customer has the option to prepay it at any time in part or in full. The putable advance is another product. In it, the member actually owns the option and the borrower is allowed to return the funds to the bank without a prepayment fee as designated on specific early termination dates. The convertible advance is an advance where you actually sell the option to the bank, and that's reflected in the pricing of that advance. We pay for that option. But that option allows the bank to terminate that advance after some lockout period, any time thereafter, on predetermined dates. The convertible advance with a strike ties our ability to call to a separate index. So let's say you take down a convertible with a five-year final maturity and a two-year lockout period that becomes callable for the three years, quarterly. It only becomes callable if the index specified by you reaches the level specified by you.

Say, for instance, you set one-month LIBOR at 7.5. That's the point in which that option becomes exercisable by us. If in one of those, essentially 12 dates in the three years remaining of that advance, LIBOR does not reach 7.5, we cannot call that away from you. One of the products that we've seen a great deal of interest in from our insurance company members is the letter of credit. The bank's AAA credit rating ensures wide acceptance of these letters of credit for multiple purposes. Letters of credit can help members reduce funding cost over a wide range of

financing activities. We're always looking for new and unique ways to use those letters of credit to help our insurance company members.

We're also always looking for ways to meet the needs of our stockholders in other ways. This results in a product development process that is initiated with requests from our customers. One of the products that is currently under construction is option-embedded advances with caps and floors. That has some particularly interesting FASB 133 implications. A prime-based floating-rate advance is one that has just been approved and will actually be on the menu soon. So not only do we have LIBOR-based floating rate advance, but we'll also have prime-based. If there are other indexes that you feel are interesting you'd like us to explore, we're certainly willing to do that. And then also, there is a guaranteed line of credit. These are just a few of the things that have come from our membership that we're currently looking at investigating and that are currently going through that product development process.

Another program that the banks offer is mortgage partnership finance. This is a third secondary-market alternative to Freddie Mac and Fannie Mae. It eliminates guarantee fees, and the seller is compensated for sharing the credit risk. Essentially what happens here is that mortgage originators have a third option. If you look at the cost of guarantee fees dictated by the two other agencies, one could contend that those guarantee fees are somewhat exaggerated. What we would suggest is that for mortgage originators we use their credit expertise and, in fact, pay them to share a small amount of the credit risk.

Through the community investment program, you can access some rather significant discounts from our regular pricing. Each request for a community investment advance is considered on a case-by-case basis. There is also the affordable housing program (AHP). It is a twice-a-year competitive grant program which is designed to benefit individuals and families below 80 percent of the median income. The AHP grants go to members to be used for the purchase and construction or rehab of occupied or rental housing. We actually contribute 10 percent of the bank's annual net income to those programs. So, we think that's a very attractive option for companies who are involved in those kinds of activities. In talking about the spike in insurance company membership after the Gramm-Leach-Bliley Act , we at the Des Moines bank have taken a very, very significant interest in this business where you're seeing an increased interest by companies in the bank system, and we would expect that to continue. At the end of the day, we're a relatively low-cost source of stable funds, and who can't use that?

The Des Moines bank is extremely committed to this initiative. We are the only home loan bank with a dedicated team and over two years of research into the needs of the insurance industry. We also have an affiliate collateral agreement. This is something that I think is very interesting. Jay mentioned that based on the domicile of a particular company it would access that particular home loan bank. The affiliate collateral agreement will allow us to have affiliates borrow through one

entity. So, in some cases there may only have to be one member to be able to access funding assuming certain things are in place. But, we're looking at how to really expand membership without expanding bank relationships across the country, at least from our perspective.

We see a great deal of potential in working with this industry, so much so that, as I've said, we have dedicated a team to work with existing members as well as prospective members. Through these members, we're also committed to working with appropriate regulators and trade organizations. This is evidenced by the fact that the board of the Federal Home Loan Bank of Des Moines has recently given its approval to commit the necessary resources to address concerns raised by some of those groups. This further ensures that the Des Moines bank will continue to establish the infrastructure needed to facilitate a successful relationship with this industry. The message here is that not only are we listening, but we are dedicated to working in a collaborative way to find solutions that are beneficial to all parties.

MR. THOMAS M. GRONDIN: I'm going to try to give you a member's perspective of what it means to be a member of the FHLB and what are some of the benefits that insurance companies can enjoy, as a member. Also, I want to talk to you about the product and how the whole process of collateral works and what all that means. I also want to discuss some of the risk-management benefits of being a member and how to capitalize on those benefits. I'm also going to go over some of the economics of transactions, and try to summarize and explain some things that I think are important to look at.

There are many benefits of membership. We're talking about option-free, locked-up funding at any term, from one day to 20 years. Although there are types of advances you can do with options in them, there are the locked-up options. Another benefit of membership is diversification of markets and customers. I think this can vary in importance from insurance company to insurance company. It's very important to us at our company. Another benefit is immediate funding with no sale required. With this, there is no marketing or promotion required. And, you know, this is same-day funding, and we know that's the case because we've actually tested it. This does improve the liquidity position, and I'll go into this in a little bit more detail later. Lastly, the Federal Home Loan Bank of Des Moines has provided incredible service. They've proven to be flexible, understanding, and an excellent business partner. I think you'll really be quite pleased with the relationship that you build.

There are a lot of products, but I'm going to focus on the advance-type products that are straight-up, option-free advances. These can take one of three forms—overnight advance, repo advance with a term of one week to six months and long-term advance, with a term up to six months. The long-term advance can be fixed-or floating-rate. I think the only material difference here between these three, besides of course the term, is the way interest is calculated. But, again, the economics are still the economics. The first two, overnight and repo, you can think

of in terms of cash or liquidity management tools. We do utilize the floating-rate option ourselves when doing advances more than six months in term.

We do issue a funding agreement. We do that for several reasons. We do not want debt on the balance sheets. When we're doing a longer-term advance, we don't treat this any differently than any other spread product that we sell. It's an institutional product to us. And this is part of the normal course of business. And that's how we use it. So there are some capital implications of that because you're holding C-3 charges, but I think even with the latest changes in RBC there is now a capital charge even if you are recording this as debt. So that is newly out there. So I think that one advantage of treating this as debt is if it hasn't already gone away, it might be going away. The member does have termination rights, and this is very important. There's a mark to market charge for termination, but this is a very valuable tool for liquidity management, which I'll get to in a couple of minutes.

So what's the catch? There are a lot of benefits there, so there's got to be a catch, right? Well, there is. You do need to buy FHLB stock. It's roughly five percent of advances. There are a lot more complicated things going on, but you can think of it pretty much that way. But, this pays roughly LIBOR plus 30, at least from Federal Home Loan Bank of Des Moines from which we are a member, which really isn't a bad deal. I don't think it's a bad deal for an AAA-rated bank. Members must secure advances with collateral, and you can do this either directly to the bank or using a third-party custodian. Again, everything I'm saying here is with respect to the Federal Home Loan Bank of Des Moines because I do not have first-hand experience with the other banks. They all are different in some ways.

So, how does collateral work? You must pledge assets subject to certain over-collateralization requirements. But collateral levels vary by type and quality of assets pledged. It's necessary to maintain the bank's impeccable credit standing, and members and the public benefit from that high credit standing. Without it, the bank would not be able to keep its AAA credit standing. It would not be able to charge the cost of funds that it does. So, it's important to keep the bank secure. Pledgeable assets include cash and Treasuries, MBSs, commercial mortgage-backed securities, commercial and residential mortgages, small business administration loans (SBAs), etc. The bottom line here is that they're all mortgage-related assets outside of Treasuries and cash, but it's the mortgage-related assets that are consistent with the bank's mission.

The assets that are pledged are still owned by the member. All investment income flows to the member company, and this is reported in the annual statement. Pledged assets have a C next to the line item in seriatim detail reporting in Schedule D. Aggregate collateral pledged is reported in the general interrogatory as 23.26 of the 2001 Annual Statement. Of course it moves around year to year, but that's important there because the NAIC RBC formula picks up that line item and charges a one percent capital charge for assets pledged as collateral. The reason for that charge is a deemed loss of flexibility on having assets pledged as collateral.

However, my personal opinion and I think an opinion that was reached as well by some recent regulatory efforts looking at collateral pledge, is that the member does maintain control of the assets pledged via substitution rights in addition to not granting re-hypothecation rights to the bank. So the bank can't take your asset that's pledged and reloan it to someone else or sell it.

I want to talk a little bit about liquidity risk mitigation. It's easy to see the benefit of the product side. You can issue large advances at a cheap cost of funds. You can invest just like we do with every single product we have. Every product we have has an asset accumulation component to it, and, of course, with institutional business that is pretty much the only profit source. The same thing is true with FHLB advance. But there are liquidity risk benefits as well, and I believe the current liquidity position of the company is improved by doing an advance. That is because you're issuing an illiquid liability. Remember, this is locked up. What you do with the money is you buy a mixture of liquid and illiquid assets, and, of course, that's going to vary by company. Your current liquidity position benefits are really a function of a proportion of the assets pledged in any one class versus the salability of that class, and this is more easily explained with numbers.

First of all, you have your sources being assets, and then you have your uses, which are liability cash demands. And this is just a mocked-up example. I have assets equal to liability, both being \$1,000. It illustrates over various time buckets the amount of assets that you can sell in the market without taking the severe haircut on the sale, versus how much liability could possibly be due at that point. There are acceleration provisions provided for some of your liabilities. You should take those into account as well, assuming that this is the worst-case scenario. And then we develop an excess liquidity in terms of dollars and a coverage ratio, which is just the ratio of excess liquidity to the required liquidity, which is the liability cash demand . Setting this up is important, and understanding it's important, because the first section here looks at what this looks like without doing a \$100 FHLB advance (Table 1).

Table 1



## **Example: Current Liquidity**

Pre \$100 FHLB A	dvance					
Assets:		<7 days	<30 days	<90 days	<180 days	<1 year
Bonds	600	12	90	240	540	600
MBS	250	13	50	125	225	250
CML	150	-	-	-	38	113
Liabilities	1,000	10	50	150	300	600
Excess Liquidity		15	90	215	503	363
Coverage Ratio		2.5	2.8	2.4	2.7	1.6
Pre \$100 1-year t	term FHLB	Advance (	75% MBS a	and 25% C	ML pledged	*)
Assets:		<7 days	<30 days	<90 days	<180 days	<1 yea
7100010.		aa, c	TOO days	100 44,0	< 100 days	< i you
Bonds	660	13	99	264	594	
	660 275				-	660
Bonds		13	99	264	594	660 189
Bonds MBS	275	13 14	99	264 138	594 189	660 189 124
Bonds MBS CML	275 165	13 14 -	99 55 -	264 138 -	594 189 41	660 189 124

What we do next is to assume we add a \$100 of an FHLB advance. What I have assumed here is that we pledge 75 percent mortgage-backed securities and 25 percent commercial mortgage loan. We see here at the bottom that I'm assuming that the over-collateralization requirement for the mortgage-backed securities is 15 percent, and the commercial mortgage loans requirement is 40 percent. And so what I assumed is that the assets have been invested, and the cash from the advance has been invested pro rata on the assets. We took them and we increased them 10 percent, and the liability now is \$100 higher, and you can see that the liability doesn't change for periods of less than one year. And you can see the excess liquidity has increased in size. And you can see the direct result in the coverage ratio of a 0.2 increase in coverage ratio at the seven-day point, 0.3 at the 30-day point and so on. The reason why, at the 180-day point, the coverage ratio is equal between the two is because at the 180-day point we're essentially assuming that the assets you have pledged to back the collateral could have otherwise been sold.

Prior to the 180-day point some assumptions that you have to make are, out of the mortgage-backed securities that I have, of the \$275, how much of those can I realistically sell into the market under these time constraints? You must keep in mind that it's really not going to be \$275, it's going to be a much larger number for larger companies, and you can't flood the market with hundreds of millions or billions of dollars in mortgage-backed securities. So what you're looking at here is that up to the 90-day point, I could not sell all of my mortgage-backed securities anyway in the market. So, I'll just sell the ones that I've not pledged to the Federal Home Loan Bank to secure the advances that I've taken down, and, therefore, I've

increased my available liquidity. So, the coverage ratios improve up until the point where you could have actually sold those securities in the market. Then you're stuck. You can't sell them because they're now pledged to the Federal Home Loan Bank. But you can see how you benefit, though, over the more critical seven-, 30-, and 90-day timeframes, which are really more of the stress-type timeframes that we're concerned about.

Next I'm going to move onto stress liquidity. Membership in the FHLB program gives you access to same day funding with no marketing or promotion required, allows you to convert CMLs to cash, next day, for a period, allows you to sell liquid assets pledged (MBS) and substitute illiquid assets (CMLs) to maintain pledge requirements, and gives you the termination option on the advance. The point that I want to get across here is how to use the Federal Home Loan Bank in terms of a stress liquidity situation for whatever reason. If the markets are shut down, such as they were on September 11, and you need to generate some cash because you can't sell assets, FHLB can help. You can improve your liquidity position by substitution or by generating additional advances from the Federal Home Loan Bank and using the most illiquid assets that you have that can be pledged to the bank, instead of the more liquid ones.

So, what we're doing in Table 2 is assuming that we still have \$100 in FHLB advances taken down, but instead of pledging 75 percent in the securities, I'm going to substitute commercial mortgage loans for those MBS securities. You can see that as a result, the coverage ratio now increases at the 180-day point from the 2.7 that it was before to 2.9. The reason for that is we can't sell our commercial mortgage loans in 180 days. So the fact that I'm utilizing those and pledging those to support my advances hasn't hurt my liquidity position. So that's one way to improve your liquidity position. Now, an even better way under this particular scenario is to use our commercial mortgage loans that are available at \$165 and actually take down an additional \$100 in advances, the liquidity coverage ratios, instead of being 2.7, 3.1 and 2.7, would be 2.9, 3.4 and 3. So you can see a significant increase in your available liquidity under these scenarios by pledging commercial mortgage loans and being able to maintain some kind of commercial mortgage loans on balance sheets that are available for these scenarios.

Table 2



#### **Example: Substitution**

Pre \$100 FHLB Ad	vance					
Assets:		<7 days	<30 days	<90 days	<180 days	<1 year
Bonds	600	12	90	240	540	600
MBS	250	13	50	125	225	250
CML	150	-	-	-	38	113
Liabilities	1,000	10	50	150	300	600
Excess Liquidity		15	90	215	503	363
Coverage Ratio		2.5	2.8	2.4	2.7	1.6
Pre \$100 1-year te	rm FHLB .	Advance (	100% CML	pledged*)		
Assets:		<7 days	<30 days	<90 days	<180 days	<1 year
Bonds	660	13	99	264	594	660
MBS	275	14	55	138	248	275
CML	165	-	-	-	25	25
Liabilities	1,100	10	50	150	300	600
Excess Liquidity		17	104	252	567	360
Coverage Ratio		2.7	3.1	2.7	2.9	1.6
* MBS and CML ass	numed to h	- 1F0/	and 100/ k		a ativa lu)	

There are risks, of course, in any new initiative and any product. I'm not going to get into all of the traditional risks that are present in any kind of asset accumulation product. Specifically here we're talking about regulatory and rating agency potential issues. The reason I mention this is because client/product and collateral requirements are relatively new to the industry. This is a fairly well-used method in other financial arenas on the banking side, but insurance companies don't do a lot of this currently. I think that in order to be competitive, insurance companies will need to do more and more of this, whether it's through FHLB programs or through collateralized swap agreements to manage your derivative counterparty exposure. I think collateral's going to become more and more important to the industry. So, there is education that is required, and it's not just, of course, regulators and rating agencies in terms of how you're using the collateral, but also the insurance companies themselves.

The next risk is maturity laddering. You could be talking about some fairly large dollar sizes here. You don't want to have all of your business maturing on the same day, so you just spread it out. And what's nice with the bank is that everything is so flexible. You can take down your advances today on a certain size, and you can spread out the maturities. As H.D. said, it's a matter of picking up the phone and saying I'll do \$150 million in advances and I want 50 maturing on this date, 50 maturing on this date, and 50 on this date. And then that's it. And they'll come back with pricing. And then you agree with the transaction.

On liquidity it's really important to maintain excess capacity in asset classes to keep your coverage ratios high. The key is to keep the posting percent under one minus

the salable asset percent that your investment guys are telling you they can sell in that time bucket. So let's say you're most concerned about needing to improve your liquidity up to the 90-day point. As long as you keep the amount of assets for a particular type pledge under the amount that the traders are telling you that they can actually sell to that point, you'll be improving your current liquidity position.

Market value volatility of assets can create volatility in the amount pledged. That's one of the reasons we do floating rate advances. There's just a lot less volatility in the amount that you'll need to pledge. That is because, of course, the assets are marked to market. So if you back that with a floating rate investment strategy, you really have a well-matched position. Then, of course, under the stress scenario you want to maintain excess collateral for the flexibility of substitution and/or capacity for additional advances. I really believe that this is the key because it's not just a product, it's a risk management tool, and I can't stress that enough.

As far as the economics are concerned, the cost of funds is low. You know, we do assess a risk charge for collateral pledge. This is a limited commodity. You just can't necessarily go pledging internally, so that is what we do. Every company is going to be a little bit different. But there are a lot of competing resources out there for collateral. There are a lot of ways we can use collateral to reduce our cost of funds and to secure it in counterparties, limiting exposure to us, and thereby reducing cost of funds. So, it's important to assess a risk charge to the product line that is utilizing that collateral. And you can come up with a charge consistent with market pricing. You can follow the repo market to come up with an appropriate charge there, and it should vary by the type of asset pledged. Pledging commercial mortgages has a high over-collateralization requirement, but it's certainly not the same as pledging Treasuries in terms of the relative tradeoff.

Treasuries have a much broader use in the collateral world than certainly commercial mortgage loans do, or some other less liquid asset types, and even some of the other mortgage-related assets. There are capital charges just like there are for other spread products, one percent for collateral pledged, as I mentioned, and there is a C-3 charge if you are using a funding agreement, and, as I mentioned, I believe there is one now as well, if you're using this as debt. And it's important to remember that you need to take into account that five percent of the cash from advances is invested in FHLB stock. So, effectively, you only have 95 percent of the money to invest in a normal asset mix. So, with the Federal Home Loan Bank in Des Moines, you've got a LIBOR plus 30 asset in your asset mix.

Just to go over some advice in summary, just remember it is a product as well as a risk- and cash-management tool. I think it's important to try to employ a floating rate asset/liability modeling (ALM) strategy for intermediate or longer term advances. And if you are uncomfortable with the contract language with whatever bank you use, please talk to them. The bank should be flexible. The Federal Home Loan Bank of Des Moines was understanding. A lot of research and a lot of work went into this, but it's a great win-win scenario for both sides. My advice is to not

just take wording as it is if you're uncomfortable with it. It can come back to bite you from a regulatory perspective and a rating agency perspective. In addition, your own internal risk management concerns need to be satisfied.

Like any other major initiative, I think it's important to visit your state insurance department and talk to rating agencies about your plans in advance of implementing them. You need to understand your state insurance law regarding pledging of collateral and understand the use of funding agreements in the state. As always, employ prudent product-development processes and a rigorous risk-management approach. Be careful with collateral, especially for new initiatives like this. These are some of the issues why it has been under some regulatory scrutiny. For example, there have been some companies out there that haven't been prudent. They've been treating this product like any other asset-accumulation product, but then they're not holding capital on it, such as C-3, for example. That's something that I think just damages this new initiative for the rest of us. It makes it harder for the industry. And it could harm the industry's reputation, as well as that of the banks.

So, keep current balances reasonable, with plenty of capacity for stress liquidity situations. Do not take your capacity to the max. Hold back a sufficient amount. Maybe for your company, depending on the size, you want to maintain \$100 million of excess capacity. Maybe it's \$500 million. Maybe it's \$1 billion. Maybe it's more. But do the work. Look at your risk-management processes and your risk profile, and determine how much excess capacity you'd like to maintain on your books.

MR. JAMES WISEMAN: I wanted to ask if you could clarify a little bit one comment you made, that you treat this as any other spread product that you would sell. Does that mean both on the statutory and GAAP side of the accounting ledger you treat this just as a liability, a spread product?

**MR. GRONDIN:** Yes, that's right. We treat it as we treat all of the funding agreements that we issue.

**MR. WISEMAN:** And the other question relates to the RBC charge. You have an extra one percent charge on all the assets. That's a standard formula for the company authorization level. So if you were trying to be a 250 percent company, you would pull 2.5 percent. Is that the correct interpretation?

**MR. GRONDIN:** Yes, that's right, and that's something that's under review. Right now it isn't a terribly material issue to the industry, but that is something I think will be under review and addressed in time. A lot of good work went into developing the RBC methodology and formula, and I think this is one of those capital issues that just was not material to the industry at the time. So a number such as one percent was used for a lot of different assets that were deemed to not be under the exclusive control of the insurance company.

**FROM THE FLOOR:** Are you treating that as an admitted asset or a non-admitted asset as far as your collateral?

**MR. GRONDIN:** For collateral pledged it's an admitted asset, and there's been some recent work by the Invested Asset Working Group and the Emerging Academy Working Group to recommend that these assets, including the over-collateralized assets pledged, be admitted assets.

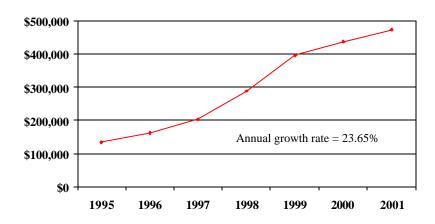
**FROM THE FLOOR:** If they're admitted assets, are you still subject to the one percent RBC charge?

MR. GRONDIN: Yes. To be not-admitted means it's a 100 percent RBC charge. So that's not good. But, yes, there still is thought to be some lost flexibility, and I don't think the risk charge, the RBC charge, is going to go away. No, I don't. But I do think that it'll be modified at some point in time and perhaps vary by asset class, for example, which I think is an important distinction. I think the program can support the economics with it as well. And actually the Federal Home Loan Bank of Des Moines, as well as a couple other that are out there were instrumental in helping the industry work with the Invested Asset Working Group and the emerging Academy Working Group to come to the conclusion that these assets should be admitted. So that is thanks to them.

Chart 1

## Growth in Advances

(\$000,000)



Source: FHLB Office of Finance

7