

FYI - An Update on Emerging Issues in Banking

The Changing Paradigm in Commercial Real Estate

October 28, 2003

Despite unprecedented declines in commercial real estate (CRE) fundamentals, the nation's insured institutions have weathered the storm of the recent downturn with remarkably strong performance in their CRE portfolios. The rapid growth of public ownership of CRE loans through commercial mortgage backed securities (CMBS) is a significant change that has influenced CRE performance since the last cycle.

In order to assess these and other related issues, the FDIC convened a September 12 roundtable of industry experts including Stacey Berger, Executive Vice President, Midland Loan Services; Sally Gordon, Vice President/Senior Credit Officer, Moody's Investors Service; John B. Levy, President, John B. Levy & Company; and David Worley, Managing Director, Wachovia Securities and Chief Risk Officer, Capital Markets Real Estate. FDIC Chief Economist Richard Brown moderated the discussion. The roundtable was followed by a lunchtime presentation by Bret Wilkerson, Director, Property Portfolio Research.

MR. BROWN: Let me introduce this commercial real estate roundtable entitled "The Changing Paradigm in Commercial Real Estate Markets."

My name is Rich Brown. I'm Chief Economist at the FDIC and Associate Director for Risk Analysis in the FDIC's Division of Insurance and Research.

I'd like to thank you for taking the time to attend with us today. This is a very important time in the development of commercial real estate markets and in their performance over the cycle. And as risk managers at the FDIC, it's an important time to be asking some very hard questions.

I very much appreciate your attendance and participating with us today, and we're going to depend on you a great deal to make sure that the difficult questions are asked of the panel today.

I would also like to thank this distinguished panel of experts that we have assembled today. In addition to the type of broad knowledge of market trends that an economist might have, they have detailed institutional knowledge about the trends that are driving commercial real estate markets today. So we're very fortunate indeed to have them with us.

I'm going to briefly introduce them to you. On my immediate right is David S. Worley. David is Managing Director of Wachovia Securities and the Chief Risk Officer of the Capital Markets Real Estate Group there. He has served in that role since 1994, and he is responsible for managing risk, setting policy and underwriting guidelines for Wachovia CMBS conduit, as well as the activities involved with the REITs, commercial real estate structure loans, including bridge and mezzanine financing.

Prior to joining First Union, Mr. Worley was Vice President with Interfirst Bank, where his responsibilities included relationship management for commercial real estate and workouts during the 1980s.

David, welcome, and thank you for participating with us today.

MR. WORLEY: Thank you.

MR. BROWN: Next to David is Sally Gordon, someone who has participated in previous FDIC discussions of commercial real estate trends. Sally is Vice President and Senior Credit Officer at Moody's

Investor Service, and she has done research for over 15 years in commercial real estate property markets, specializing now in commercial mortgage-backed securities.

She has taught courses at NYU and was a national director of real estate research and economics at KPMG Peat Marwick. She serves on the Board of Governors of the CMBS Association, the principal trade association of the industry.

So, Sally, welcome, and thanks once again for participating with us.

Next to Sally is John B. Levy. He is President of John B. Levy & Company. He brings 25 years of experience in commercial real estate. His firm, which was founded in 1995, raises both equity and debt for developers and owners of commercial and multi-family projects around the nation. For the last five years, he has arranged and structured more than a billion dollars in such investments.

John, thank you for participating with us today.

Stacey Berger was a late entrant to our lineup here. Stacey is Executive Vice President of Midland Loan Services, responsible for strategic planning and corporate business development and marketing activities. Midland is a wholly-owned subsidiary of the PNC Financial Services Group, a leading provider of loan servicing, special servicing, and technology for the commercial mortgage finance industry.

Prior to joining Midland, he was a senior executive responsible for the Real Estate Assessment Management and Investment Advisory Group for Landmark Land Company and was also Director of Research for Smolken Consulting Services.

Stacey, welcome, and thank you for joining us today.

In terms of agenda, I'd like to break down the roundtable this morning into a couple of areas. First, I'd like to give a little background on why we've convened this conference from the FDIC's perspective of risk management.

Then, I'd like to turn to the panelists and look at some of the long-term market and institutional developments in commercial real estate finance, the things that have really changed over the last decade and things we need to be vitally aware of as we look at risks in the banking industry.

Next, I'd like to move on to the lessons learned from recent market events and the implications they might have for the industry. Although we're going to get a tour of the horizon in terms of market fundamentals during the luncheon talk, I would also like to get the perspective of the panelists in terms of the property outlook on various geographies and product types, and what's hot and what's not.

And finally, if I may, I'd like to branch out to quantitative tools of the trade, including the indices and reports that Sally Gordon and John Levy, in particular publish on a regular basis.

I'm going to throw some of these broad questions out to them that they can expand on, and I'm going to rely on the audience to bring in some of the detailed institutional questions.

So if at the end of the day there's an important question that's not asked, or an important point that's not made, we'll all be at fault for that.

I'd like to give a little context to why we convened this session today. Much of this may be familiar to this audience, but I think it's useful to some extent to go over it. The Federal Deposit Insurance Corporation manages insurance fund reserves in the BIF and the SAIF Funds in the neighborhood of \$45 billion.

These reserves stand behind insured deposits in the industry of \$3.4 trillion, for a reserve ratio for the combined funds of about 1.31percent.

Now, this seems like a lot of money, except when you consider the losses that were experienced by those insurance funds since 1989. Insurance losses to the BIF since then have been \$21-1/2 billion, and the combined insurance losses accruing to the savings association insurance fund, RTC, and FSLIC, have been over \$82 billion. In total, that's two and a half times the size of the current insurance fund.

Most of these losses have arisen from credit risk. A few years back at a conference held by my alma mater, The George Washington University, I heard Nobel Laureate Joseph Stiglitz define credit risk in a simple and elegant--yet mathematical--way. Credit risk, he said, arises from the simple fact that there are an infinite number of people who wish to borrow money, but only a finite number of people capable of paying it back.

(Laughter.)

In the late 1980s and early 1990s, the banking and thrift industries experienced, first hand, just how wide the gulf can be in commercial real estate lending, between those who are willing to borrow and those capable of repaying. We found in our experience there is hardly a better way to lose a lot of money in a short period of time. These projects, when they collapse, can result in losses of \$10 to \$20 million at a time.

We did some forensic analysis of some of the largest failures and some historical studies of factors that contributed to the crisis and what we learned in cleaning it up. In terms of CRE lending problems, they are familiar to you I think. There are geographic concentrations that cause problems. On the other hand, if you diversified geographically, you got out-of-area lending, and unfamiliarity with local market trends also caused problems.

Underwriting was poor, and that was documented in detail. There were faulty cashflow assumptions, high loan to values exceeding 100 percent in some cases, no takeout financing, speculative land loans, and all in the midst of historically volatile regional economies.

So it's fitting in a way that we're meeting here today in the former headquarters building of the Resolution Trust Corporation. That wasn't by design. But, symbolically, that's where many of those problems were resolved, and the assets were moved back to market.

That's also where some of the new market practices developed, some of the developments in commercial mortgage-backed securitization, in reps and warranties, and other market practices. The large volume of deals that came out of the liquidation process at that time, compared to the size of the private market, I think, helped develop some more standard practices in those markets, and I think maybe our panelists may comment some on the role that that played over the past decade.

Now, some of the practices were controversial at the time, bringing assets directly to the market in mass. Policies had a profound effect on the operation of the commercial real estate markets and investment returns at the time. If you talk to certain individual borrowers, those policies are still controversial. People have strong feelings about it.

But in retrospect, the problems were resolved in relatively short order. We had a 10-year economic expansion during the 1990s as those problems were cleaned up, and markets began functioning again, and these institutional changes that these experts will tell you about really took off. We're going to get to those in just a minute.

We're in a new cycle now. There wasn't much commercial real estate building in the mid 1990s. There

has been a lot recently. But one thing that we learned in the last cycle is we don't want to go through it again. We want to promote practices where markets function efficiently, where market distortions that contribute to boom-bust cycles are minimized, and where lenders base decisions and manage risks on good information. That will help more banks to stay safe and sound.

And that's why we're devoting resources to analyzing commercial real estate trends and that's why we're having this meeting today.

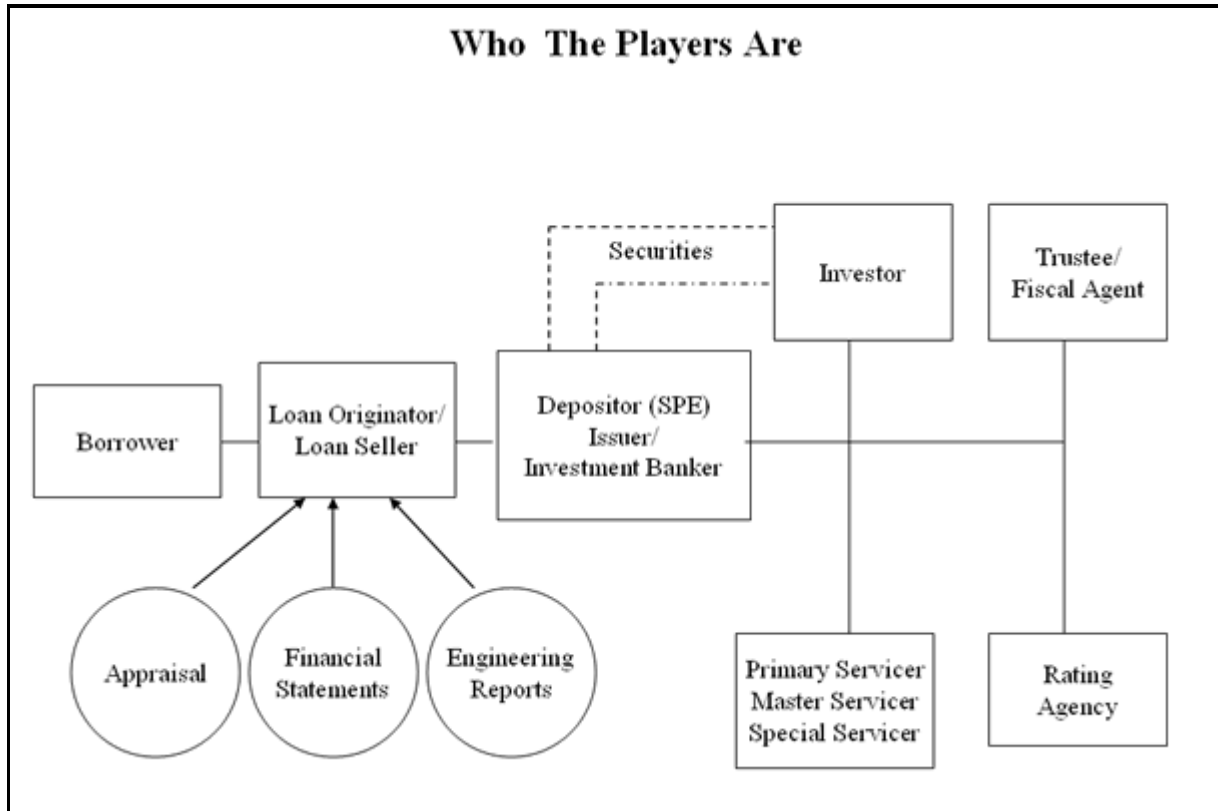
A couple years ago the FDIC released some studies warning of the rapid building in some of the hot markets around the country and office markets, and wondering what would happen if demand collapsed. I have to say we did not anticipate the collapse in demand that actually occurred. We see weak fundamentals now, but we also see commercial real estate portfolios at insured institutions performing very strongly. So there is this disconnect that we need to explain.

And the key question now is, how long is that going to persist? We know low interest rates have helped. We know that the deals are somewhat better; the underwriting is somewhat better. We have some documentation of that. We know that there's better market information.

But in terms of how long this situation may persist, in terms of how concerned we should be about the weak fundamentals and the ultimate effects in terms of credit risk in the industry, that's what we really want to get a handle on today.

In terms of commercial real estate exposures, we see about \$909 billion in commercial real estate and construction loans at FDIC-insured institutions. That's up about 10 percent in the past year. And that compares to real estate investment trust assets of about \$100 billion. CMBS holdings I believe from the *Flow of Funds* are around \$270 billion.

So one more item before we kick off here, I do want to provide a little background on the structure of the industry. We understand the traditional bank lending and portfolio process, but this new process that really kicked in starting in the 1990s, I want to show this diagram from Sally Gordon's slides and use it to show you where the panelists fit in.



In terms of the players, the rating agency component is on the far right, that's Sally Gordon's area. They rate the issues and perform a lot of excellent research on market trends. In terms of the originators and the loan sellers back on the near side, that's going to be John Levy and David Worley. Then, on the servicing side down at the bottom, that's the role played by Stacey Berger—master servicing and special servicing.

And we also wanted to emphasize the role of the investors, the purchasing of the B-pieces especially in the securitization process. We were going to have Larry Duggins here. He couldn't appear with us. But in any event, hopefully we can provide some perspective from that angle as well.

Now I'd like to turn it over to the panelists to talk to you about the particular role that they play in this process, so you can get a better understanding of where they're coming from as you see where we're coming from as well. I'll turn it over to David first.

MR. WORLEY: Okay. Well, I work for Wachovia Securities. When you think of Wachovia, you think of a bank, and you think that banks make construction loans and mini-perm loans. We do that over on our retail side of the bank, and we're one of the largest real estate lenders in the country. I think we have a portfolio of \$20-some-odd billion of real estate loans.

That is not my world. In my world, we run a number of different businesses that touch a number of these boxes. I've put my slides up here, and I swear to God, most of my good stuff is at the bottom of the slide. You may not be able to see it, but that's where it is.

(Laughter.)

We run a number of businesses at Wachovia Securities. We started these businesses back in 1994. A gentleman named Ben Williams, who runs our fixed income area, a gentleman named Steve Jones, and I

kind of sat in a room and started dreaming, coming up with some ideas.

But the different businesses we run -- and I'll kind of tell you how we touch these different boxes. We run a very large fixed rate conduit business where we make permanent loans on commercial real estate, five- to 10-year kind of fixed rate loans all over the country. We package those up, create bonds, and sell them.

We do the same thing in what we call large loan group, which is typically floating rate transactions, two- to three-year loans, with one-, two-, three-year extension options on them. Those also get packaged up and securitized, primarily only investment grade there. So you can put us in the loan origination/loan seller box.

We run a very large servicing shop also, where we play all of these roles -- primary, master, special servicer. We are also investors and this is the part of the world that I work with. Our balance sheet expands and contracts over time with loan outstandings or various assets.

When we're short assets, we look to fill the balance sheet up. We will go out and buy securities in the market. We are very large buyers of AAA, CMBS. We are also very large buyers, and one of probably the largest buyers of CMBS IO securities.

We analyze financial statements. We run a business where we help corporations take real estate off their balance sheet, primarily investment grade corporations, through structuring of synthetic leases or through sale leaseback, where we will physically actually buy their building from them, lease it back to them, and then we will go out in the market and lever those properties where we become the borrower. And then, we ultimately sell those properties in the 1031 market.

That's the CMBS part of the world that we play. We are very large in the REIT industry, where we bank probably about 60 REITs. We commit about \$3-1/2 billion of capital to the REIT industry. We are also top in the lead tables as far as public debt underwriting for REITs, preferred equity offerings, and common equity offerings.

We run our own fund with regards to the structure finance business, where we do bridge loans, mezzanine type loans, B notes, or "mezz", just depending on how we structure it. And we do project level equity investing, where we will go in with a developer and invest equity to develop or reposition a property for sale.

We are very large tax credit buyers; tax credits, Section 42; and historic tax credits. Tax credits are for low to moderate income multi-family and -- primarily multi-family type product.

Through that, the tax credits flow with the ownership of the real estate. We own approximately 40,000 multi-family units all over the country, and we service those transactions.

We are very large in the real estate CDO business, where we work with third parties who own subordinate CMBS securities. We will go out and buy REIT paper, other types of real estate assets, and repackage those for our clients. We create some arbitrage in the transaction, and help them achieve basically long-term financing out in the public markets for the securities that they own.

I think I've covered pretty much what we do in our arena, and for the most part, I manage risk for all of these areas. And when you think about a normal bank in a portfolio lender, everything that Rich said is absolutely true. When I manage risk -- and I came out of Texas -- I saw the depths of the problems in Texas. I kind of decided, yes, I'm really not smart enough to determine which loans are going to go bad and which ones will not.

So we've kind of developed the mantra in our shop, "We're in the moving business, not the storage business." So what we do is we find people who like to take various layers of risk. We structure risk. We sell risk at appropriate prices. And we act primarily as an intermediary.

Last year we were the largest intermediary of capital to the real estate sector, being involved in about \$23 billion worth of real estate transactions. So that's a quick review of what we do.

MR. BROWN: Thank you. Sally?

MS. GORDON: Thank you. Rich asked each of us to explain what our businesses are and how we fit in -- whether in specific boxes on this slide, or elsewhere in the CMBS process generally. So, we're early in the food chain and late in the food chain, both as a rating agency.

Assuming that either David or John has originated some loans which are suitable for capital markets execution -- not all are. A third or more multi-family loans are well-suitable to CMBS environment. Less than 20 percent of commercial mortgages at this time are in securitized instruments.

Nonetheless, that's sufficient to no longer be at the margin of the real estate industry. So assuming they've originated loans, which are both suitable and appropriately structured for CMBS execution.

The investment banker then structures the securities with our able assistance by saying how much of the total can be rated AAA, how much can be rated AA, and so on down the credit curve. So we do the sizing of the deal, because we decide how large each of those rated classes may be. This, of course, by default, determines how much subordination or credit support is behind each of them.

Our next process, early in the structuring deal, engages people like Stacey as one or another kind of servicer, whether directly related to the borrower, rolling out mini-pools, or being in the position to work out problematic loans somewhere later in the process.

So, we are, as a rating agency, involved in the structuring of the deal. After it's issued we also have a fair amount of interaction with investors, and, again, with servicers as things do or don't go as intended. And given that it's real estate, you almost certainly know that something will not go as intended in the course of a 10-year horizon that the bonds are out there.

So we have frequent conversations with investors monitoring both the bonds and the performance of the underlying assets, which, of course, affects those bonds. So the rating agency is involved from the very early process and monitoring the bonds until they die, until they are paid off.

MR. LEVY: Good morning.

Which box are we in? We're in the origination box. What do we do? It's a good question.

What do we do? It's a good question. I run a real estate investment banking boutique, and we're on the commercial real estate side. I think it's fair to say what differentiates us from the other members of the panel is that we are representing the capital user side of the equation, not the capital provider side.

A typical transaction we do, we structure, we originate, we market, we negotiate, we close, and then we service the commercial real estate loans.

Here are some of the types of deals that you might see us doing, and things that are on our playing field. We do long-term debt that ranges from three to 15 years, primarily five to 10 years. Those can be either fixed or floating. We're involved in mezzanine debt and preferred equity -- again, fixed or floating. And we have also significant experience in the bridge loan business and in acquisition loans.

I suspect that because most of you come from the regulation side, you probably don't see us in the transaction business. You may see us in some of the research we do. The most visible that -- and I think you have a copy of it -- is our monthly commercial mortgage survey which is in *Barron's*.

It's been a regular feature for the last 20 years, and in it we survey more than 30 of the largest institutions, both on the CMBS side of the equation and on the whole loan side, the pension funds, and the insurance companies. It has become, probably by default, a benchmark for commercial rates, terms, and conditions.

The next research piece -- and, again, I think you also have a somewhat truncated version of that in your files -- is the Giliberto-Levy Commercial Mortgage Performance Index. This is a piece that Michael Giliberto and I started over 10 years ago.

It's really an index just like an S&P or a stock index or a bond index. The only difference is that this index is for commercial mortgage whole loans. The database is about \$170 billion, and it's a mark-to-market index. You may have seen it around in a number of publications.

We also do what we call an internet underwriting survey for some 25 to 30 institutions that are all either insurance companies or pension funds. We get every one of their transactions monthly and then report back to them on what the market looks like in a very timely fashion. This is somewhere in the \$2-1/2- to \$3-1/2 billion a month in individual transactions.

On the principal side, we are involved in Queenswood Partners. This is a proprietary fund, and we are raising and placing mezzanine debt and preferred equity to capital users. We think it's a somewhat underserved market. Our typical deal is \$1- to \$5 million.

This morning I think we have a lot of ground to cover. I'm particularly interested in hearing not only from our fellow panelists but from you. And I think one of the questions that I -- we'd like to talk about, or certainly I'd like to talk about, is mezzanine debt and preferred equity.

I know that from your point of view if leverage is probably bad then mezzanine debt -- more leverage, has got to be terrible. So that ought to be fertile grounds for the discussions. I can assure you that our borrowing clients don't view it quite your way. But nevertheless, I'm looking forward to hearing from you.

Thank you.

MR. BROWN: Thanks, John. Stacey?

MR. BERGER: You'll have to excuse me. My preparation for this took place between the Bethesda Metro and Farragut North, but --

(Laughter.)

-- I do this a little bit, so I can wing it.

My name is Stacey Berger. I'm an Executive Vice President with Midland Loan Services. Midland is one of the leading third party commercial loan servicers, special servicers, and providers of technology solutions for the commercial real estate finance business.

As Richard indicated earlier, we're a wholly-owned subsidiary of PNC Financial Services Group. Midland currently services about 80 billion in commercial real estate loans. That represents about 13,000 individual loans. We're also a leading special servicer, special servicing in the CMBS vernacular is responsible for the resolution/workout/ liquidation of non-performing loans.

We have nominal balances that we're responsible for -- about 40 billion, and we currently have one billion that's in special servicing, non-performing and in the resolution process.

We're actively involved in CMBS on a variety of fronts. In addition to being a servicer and special servicer through our affiliate PNC Real Estate Finance, we originate and securitize conduit loans. PNC is also a significant construction lender to institutional borrowers. And through our affiliate Black Rock, a fixed income money manager, we are a significant investor in both investment grade and non-investment grade CMBS.

Interestingly enough, I'm pretty familiar with this building we are meeting in today. We had our start as a company as a contractor for the RTC in the early '90s. We provided data processing and information systems, and actually a couple of those contracts are still in place with the FDIC.

We were also an asset manager. We got our start in the commercial loan servicing business as one of the national servicers for the RTC. We also acquired over \$1 billion of non-performing loans in the first structured transaction with RTC. So we've been around here for a little bit.

MR. BROWN: Stacey, thank you.

And thanks to all of you for clarifying what can be a very complicated process. There's lots of moving parts. I, obviously, have a lot to learn about how it's all put together. But I did want to ask each of you as a starting question, what is the single most important institutional development that had led to the rise of the CMBS market and all of the complex institutional structure that seems to be developing in the market? What is the single most important development that made this possible now as opposed to before?

MS. GORDON: As opposed to 10 years ago, or including 10 years ago?

MR. BROWN: Well, just as opposed to before it existed.

MR. LEVY: The RTC really made all of this possible. There was some -- and Sally and others can correct me, but there was some securitized market in the mid to late '80s. It really didn't do anything, and it was a lot more fluff than it was substance. But at least in my view, had there been no RTC and had there been no thought about securitizing these loans, we would really be where we were when I started, which was in the whole loan business, where you made a loan, you -- in my case you banked it or brokered it to an institution, and they held it for the term. And occasionally they might have thought about selling it, but that was really something -- that wasn't a very manly thing to do.

So the RTC is really responsible for this, and I say that in a very positive tone.

MS. GORDON: Yes, I'd like to underscore that, and maybe flesh out ways in which the RTC was really critical in jumpstarting our industry. It's often said that the space program is like a giant welfare program for engineers, because it's really a cost-plus environment.

The RTC was something similar for the financial industry. I hate to say welfare for investment bankers, but nonetheless for our industry, because there was this critical mass and volume of mortgages that we knew were going to be securitized once that was the chosen disposition course. That means that as soon as there's this much business out there, you can justify the expenditure in developing the analytical models, the software, the structural processes.

Stacey knows there's enough business for a servicer to get in this much. And since you have some guaranteed volume, it supported the investment in developing all of the analytical tools which could then later, with minor tweaking, be adapted to private label securities.

The second sense in which the RTC was critical was to absorb the loans that had been on the books of failed savings and loans. Those were also the institutions that were heavily involved in lending to relatively small commercial real estate assets.

With them out of the market, something else took their place functionally in the commercial real estate lending environment, and those were conduits. Conduits are businesses, as well as legal structures, that permit the pooling of many small loans and rolling them up into securities. That's something around half of our market.

So the conduits functionally replaced savings and loan firms as filling that niche in the commercial real estate lending environment.

MR. WORLEY: Yes, I'm going to concur with Sally. I think the RTC was the impetus for the industry. And the lack of liquidity in the banking market in the late '80s/early '90s really forced upon the industry the need to distribute risk out into the market.

The model for the industry is the residential mortgage model. And that business was well developed before the commercial mortgage business came into effect. And I've kind of always preached in our institution that we're 20 years behind the residential mortgage business, but we are rapidly catching up.

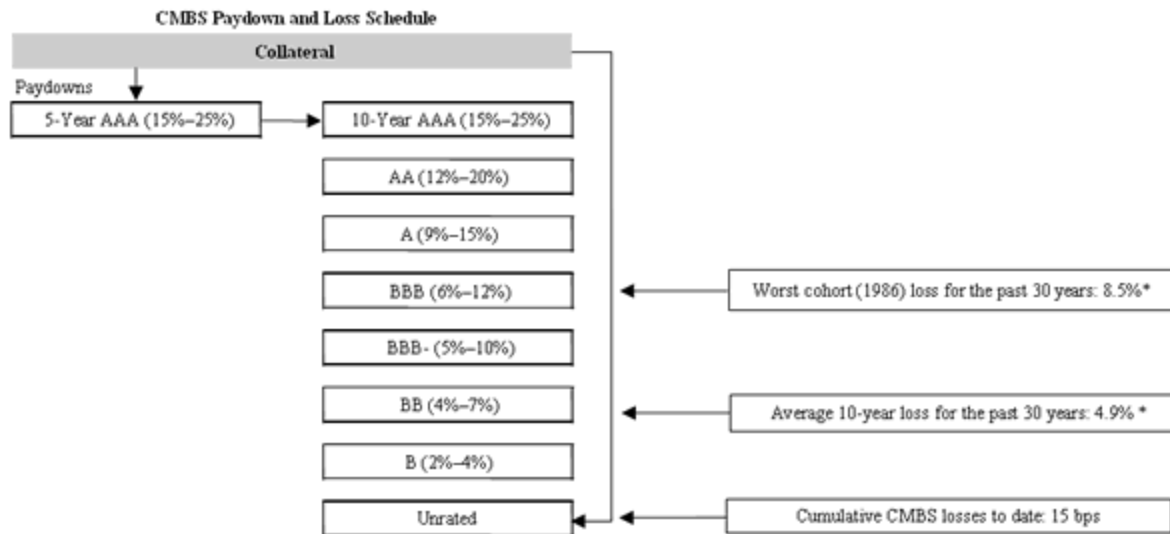
I think the transparency from the rating agencies and the distribution of risk has brought new investors in. There is transparency throughout. Now when you have firms like PPR and Torto, Wheaton Research, you can go click on a website.

You know what's going on with a particular market or sub-market. You know what's going on with job growth in a market. You know what's going on with construction supply. You know what's going on with vacancies. That helps the underwriting. And this is where the banks, in my opinion, need to get better technologically with their own portfolios.

In the CMBS market, everything is transparent. If you want to know delinquencies, you know, in a deal, you want to know exactly what's going on with a particular loan in a pool, it is very easy to get that information. Debt service coverage, whatever you want to get, it is out there.

Banks need to develop more along the lines of CMBS, in my opinion, but the traunching of risk helps. And if you would click on my slide -- I think it's number 20, I believe -- and I'm not -- and maybe in your slide presentation it may show page 19.

Historic Losses versus CMBS Tranche Subordination



Source: Wachovia Securities

* Based on "Commercial Mortgage Defaults: 1972-2000", H. Esaki, Real Estate Finance, Winter, 2002.

- Given their capital structure and losses on the collateral, CMBS continue to remain highly attractive to investors despite rising delinquencies and losses.

This is typically how a CMBS transaction gets structured, rated and traunched. And this is, you know, Sally's firm and S&P doing a lot of this work. What this allows us to do is marry up risk with people who have appetite for certain risk. Before the advent of securitization, that was not possible. Then, you were trading in a whole loan market, so you were buying all of the risk in the transaction from a zero percent loan-to-value up to 75 or 80 percent loan-to-value.

If you are a risk-averse person today, and you want very low risk, you will be buying AAA bonds. If you don't mind taking on higher risk in order to receive a higher return, you will buy down in the BB, B, unrated classes of bonds.

One point I'd like to make is about the unrated classes of bonds which are typically stipulated by the B-piece buyers at about two percent cumulatively. Through the life of the industry, this class has only had about 15 basis points of loss. Sally, based on the low loss level, maybe you can get some of this class upgraded?

MS. GORDON: Well, let me point out --

(Laughter.)

MS. GORDON: Before the rating agencies get bashed totally, our objective is to come up with expected loss scenarios, which include both the probability of default and the severity of loss in the event of default. And we are rating, if you remember, 10-year bonds.

In the last five years losses darn well should have been very, very low. We've been in a rising real estate market environment. In the next five years, we might not be in that same rising real estate market. We would, therefore, hope that the loss rates which accompany the sizes of various securities will survive that full 10-year cycle.

So we are not just rating something for next week or next month, or not even for next year. They are 10-year bonds. So we have to come up with assessments, that we believe, will look through the cycle, and absorb the downside of the real estate market environment, as well as the very nice markets that we've had in the last several years. So we'll see five, seven years from now how accurate we were.

That said, there are many people who suggest that the rating agencies were a little bit harsh five, seven, eight years ago. It's a new product. Without the kind of historical data that the single-family market has, we are only now, as David alluded, developing those analytical tools. We have the data from the CMBS market to look at how CMBS loans perform compared to life company loans, bank portfolios, and so on, but we're only getting that now. And the real test is on the other side of the cycle, not only at the end of the upside.

MR. BROWN: Sally, are the data that were developed 10 years ago in a very different institutional environment, are those data irrelevant for operating in today's markets?

MS. GORDON: No, they're not irrelevant at all. They do provide floors and ceilings of a sort. But to give some example, much of the research, including what David has up there in terms of the worst cohort and average thing, are analyses based on life company data, which is fine.

Our loans are different. They are a different composition of the total portfolios, of the pools. And they are, in fact, also managed differently when they're under stress. As David said, transparency is essential in a securities environment in a publicly-traded instrument.

So if a loan in the CMBS pool is 30 days past due, the whole world knows it. Sixty days past due, everybody knows. Ninety days past due, it's on everybody's radar screen.

In a life company portfolio, however, there are other things they can do to manage a loan that's under stress. That doesn't mean that they're doing something nefarious or nasty or shady in any way at all, but they can restructure that loan, manage the process. Another part of the firm can take additional equity and adjust the actual debt amount.

So there are just a variety of things that a life company has the flexibility to do which are not options in a securities environment. As a result, it's quite possible, and ask me in five years, that we will, we, meaning the CMBS market, will see distress in loans earlier in the process, and that life companies will stretch out their ability to manage stress. We have no such flexibility.

So we might see things differently in terms of the timetable of recognition of market stress or loan stress, as opposed to enormously different quality of loans.

Right now, CMBS delinquencies run higher than life company portfolios. We might just be seeing it shifted forward in time. We'll see in five or seven years.

MR. LEVY: On the life company side they do have a lot of flexibility that the REMIC structure and the CMBS structure doesn't have. Sally is right on target.

We have a client that we're talking to about delinquencies, and they always give you these numbers that are so low that you wonder whether they've been asleep at the switch or just not collecting all of the payments.

But, in fact, what they said is the numbers are right. The delinquencies are right. What I didn't tell you is that I'm willing to sell a loan before it's delinquent, so it never gets to my delinquency numbers. And in CMBS, those numbers do get to delinquency.

So if we look at a loan in the life company side and we say, gee, you know, Wal-mart just vacated this center. They are 80 percent of the income. We know they're going to go -- or they've given notice -- in six months that they're going to leave. A life company can sell the loan, perhaps not for 100 cents on the dollar surely, but that never becomes delinquent. So there's a very different way of accounting for it.

Sally is right on target that there is more flexibility. It's not right, it's not wrong, it's not bad. But they do have ways of dealing with it that the securitized structure right now doesn't allow.

MR. BROWN: Stacey?

MR. BERGER: A couple of follow-on points to that. In terms of the development of CMBS, a couple of structural innovations are really critical. One is servicer advances, which are really unique to CMBS. And essentially, the master servicer is responsible for advancing delinquent P&I payments as well as property protection.

Unlike the residential business where those cut off very quickly, typically within 90 days, the servicer advances those through the liquidation or resolution of the loan. That is a fundamental which supports the traunching of so much of CMBS into investment grade. Essentially, you've taken illiquid commercial real estate loans and, by providing servicing advances, given the ability to create investment grade performance across those bonds.

The corollary to that in CMBS is the first loss piece, the real risk piece, which is sold to an investor. And, again, typically in residential, those would be residuals. The losses are sold to investors who have the ability to analyze those and then also the ability to manage that risk through control of the special servicer.

Another innovation is that the special servicers are compensated for managing defaulted loans and actually for their success in resolving them, unlike even the residential business where the servicer absorbs those costs.

And so, the more defaults and delinquencies, the higher their servicing costs. In CMBS, the special servicer actually gets compensated significantly more, for managing non-performing loans, and then gets a premium for liquidating them. So they are highly motivated to do that.

It is a similar case in the mortgage banking industry. Historically, mortgage bankers had the responsibility for working out loans, or assisting the life company in managing non-performing loans, and they typically didn't get paid for doing that.

So all of these factors really create a different dynamic and, as Sally said, the transparency associated with a non-performing loan in CMBS is right in your face right away.

MR. WORLEY: I do think that's a unique point, Stacey. And it's one that we harp on within our institution. We securitize many asset classes in the asset-backed world, whatever you can think of -- residential mortgages, aircraft, any number of asset classes you can think of.

The commercial mortgage securitization model is the only one I'm aware of that is a complete risk transfer business. That is why we love that business within our institution. We sell everything. We retain no risk in the transaction. Whereas, like Stacey said, in the residential mortgage model, it's typically the seller servicer who retains a residual risk in the transaction, as with many other asset-backed type transactions.

MR. BROWN: Well, we've gotten a couple of questions in about the operation of the secondary markets in CMBS, who the market-makers are, who buys the B-pieces. And I wanted to combine that with the question that I was going to ask in the first place, and it relates to a recent article in The Economist magazine about, it actually had to do with loan syndications, but I think the analogy holds here as well.

The idea of passing off credit risk through the system to a very wide group of somewhat disconnected buyers, do we know where the risk is? Is the risk being borne in an optimal fashion? I mean, it's good to disperse risk through the system. There's less fragility that way. But there's really a question of not knowing where it is, and is it building up in unhealthy ways?

So I wanted to ask, where do the B-pieces go? Who makes markets in CMBS? And where does the risk go? And are there dangers that those risks build up in unhealthy ways?

MS. GORDON: Stacey, do you want to do B-piece, and I'll do secondary trading?

MR. BERGER: Yes, that's fine. The B-pieces are -- I mean, unlike a lot of other capital markets activities, the B-pieces in CMBS are pretty well identified where they go. In fact, in a typical transaction, when it's priced, the B-piece buyer is identified. And their information is pretty well publicly available.

Likewise, the B-piece buyer controls who the special servicer is. So, again, those parties are identified publicly very early on in the transaction. There have been limited secondary trades on first loss pieces, but the markets pretty well know where the residual, the first loss pieces are on the outstanding CMBS.

There are really a limited number of CMBS B-piece buyers at this point. Typically I would say 80 percent of the transactions go to five or six firms. There are four or five other players who participate on a couple-of-transactions-a-year basis. But, again, the vast majority goes into limited hands.

The reason for that is the level of due diligence associated with buying a first loss piece in CMBS. Essentially, what you are doing is reinsuring the credit risk on every single loan. And the vast majority of the B-piece buyers at this point in time re-underwrite every single loan. They inspect the vast majority of them, physically inspect them.

And, again, the process is very expensive, very time-consuming. It takes place after they circle the bonds, because nobody can afford to spec this on the front end. It's a process that typically takes six or eight weeks on a CMBS transaction. And, again, there's limited capacity to do that.

MR. BROWN: Do they perform credit analysis after the fact, after the sale?

MR. BERGER: No.

MR. BROWN: No?

MR. BERGER: There is some -- there is a limited review once the loans are actually transferred, to make sure reps and warranties haven't been breached. But virtually all of that took place before the transaction was closed.

MR. LEVY: Stacey, the B-piece buyer also has the right to kick out loans. So there may be loans that the originator might like to have included that just don't get included. And that's another protection for them. There's no requirement that we bring them 100 loans and they take all 100. Maybe. But more likely there are some that just don't pass the muster.

MR. BERGER: Yes. That's an excellent point, John. Part of the way that B-piece buyers manage their credit risk is by kicking out loans that for whatever reasons, don't meet their criteria.

MS. GORDON: Stacey has been talking about the B-piece segment. Now, to move further up the credit curve, the rest of the capital structure is the investment grade component, which is about 85 percent or so of the total face value of the bonds.

The investment grade bonds are highly liquid. And, indeed, it's one of the ways in which the emergence of the CMBS market affects primary real estate markets. Our bonds trade with very small bid/ask spreads. Most traders say that they can sell a billion dollars worth of CMBS at issue more easily than half a billion of corporate bonds.

So our market is now highly liquid. Transparency has something to do with it. Another factor in that liquidity, however -- and when we're talking about developments that have made CMBS possible, certainly one is a different mind-set, if you will, among all of the institutional investor community. And that is one which places increasing value on diversification of their portfolios.

If an institutional investor wants Xpercent, 10 percent, whatever, of their debt portfolio in commercial real estate, they can do that two ways. They can buy whole loans or make whole loans, or they can buy CMBS, which can be a much more cost-effective and, therefore, on a net basis more profitable way to satisfy that allocation to commercial real estate debt.

Asset allocation models have become much more sophisticated, and they are predicated on diversity of risk in different asset classes. And so, CMBS is a way to satisfy the different classes fairly and more cost effectively. On a net basis, this is a higher yielding way to do it.

MR. WORLEY: Yes. I want to address a couple of things. I wish Larry Duggins, who is with ARCap, was here today. ARCap is one of the B-piece buyers and Larry would have been a great guy to ask this question. We deal with them frequently, and they are very tough guys to negotiate with.

But as far as concentration of risk at the bottom, I will tell you as an investor in AAA securities it is very important to us to look at who is buying the bottom of that transaction and know what their financial strength is. I think part of the earlier question was: "Are you worried about buildup of risk and who owns the bottom piece of that?"

There was a great example actually a couple of years ago right here in the D.C. metro area, Criimi Mae, who was a large buyer of B-pieces. They bought longer fixed rate instruments, and they financed them on a short-term floating rate basis through repo. Following the 1998 hit, CMBS spreads, decoupled.

Criimi Mae effectively was margin-called out of business. But this had nothing to do with the performance of the bonds they owned. But, I think it kind of sent a ripple through the market, and people started paying attention to that.

The other thing is that the servicing component -- and Stacey may be able to speak better to this than I can. But you pay attention to who your servicer is when you're buying up in the investment grade stack. Their ability, their capability to make servicing advances, you know, how liquid is that institution, technology -- there's all kinds of things that are very important. You know, as a bond buyer, how easy is it to get information from that servicer.

So there are a number of things when you're buying up the capital stock that are important to you. And those are I think, you know, pretty important.

MS. GORDON: Rich, if I can just return to that, because I remember the article that in The Economist that I think you're talking about. And the basic question is: is risk hiding somewhere? Either being held by entities that are less capable of assessing, and, therefore, pricing that risk?

And I think one of the advantages that the CMBS market has is not that we have changed the risk of the underlying real estate; we have reallocated the risk, so that players who are less comfortable with the real estate analysis might want shorter AAA bonds. Those who are very confident of their real estate expertise might move down the capital structure and get a higher reward for a higher risk.

But all investors can choose where along that spectrum they feel most comfortable, and, therefore, more readily price for that comfort zone. So I don't think the risk is really hiding somewhere that's going to come back and bite us in an unpleasant place, if you're speaking of the real estate risk. There might be structural risk. There might be legal risk. That's a different issue.

But the credit risk of the real estate is in your face. It's not hiding.

MR. BERGER: But, Sally, would you -- I guess the question I have is: is the credit risk on loans that originated for CMBS less than it was for comparable loans that were held in banks or savings and loans or insurance companies as a result of the public -- of the rating agency scrutiny, the B-piece scrutiny, the servicing mechanisms that are put in place, the funded reserves? I mean, has the fundamental credit risk of real estate ratcheted down some?

MS. GORDON: Okay. So you're saying, are the stuff in CMBS sort of better quality than bank portfolios because of all this scrutiny. There are those who make the opposite argument that it is of lower quality because nobody is really holding it on their books. Given those offsetting concerns, maybe we're at par.

MR. WORLEY: Yes. I think the difference may be that the loans that banks hold on their portfolios typically are high quality borrowers. The borrowers guarantee these loans, so they have a measure of risk in the transaction of their own personal net worth.

CMBS loans are non-recourse loans. They are much more highly structured than bank loans. We escrow for taxes, insurance, tenant improvements, repairs. Everything you can think of gets escrowed, even rent rollover risk. We escrow for those transactions. Typical bank loans do not do that.

So just from a pure structural standpoint, CMBS loans are far structurally superior to bank loans. But, you know, there is that element of recourse versus non-recourse, and, you know, you have to ferret through what that guarantee is worth I think in your own mind.

MR. BROWN: So there's not necessarily an adverse selection where the worst loans are staying on banks' books, and the better loans are going to the market. They're really different animals.

MR. WORLEY: I would have some concern in today's environment, in the low interest rate environment that we have, for banks that might make a living off of construction loans and mini-perm loans. Well, gosh, there's not a lot of construction business going on today, or a lot of mini-perm business. A lot of people have chosen to put permanent lockdown, long-term fixed rate financing on their projects.

So I would have some concern that bank portfolios have been somewhat adversely selected to the permanent market, be it CMBS or life companies, or wherever.

MR. BROWN: You know, we're getting some terrific questions in from the audience. So keep them coming in. This one must come from somebody working on the Basel 2 risk weights. It has to do with correlations.

(Laughter.)

It basically says that the problems 10 years ago were not just related to the probability of default, but it was also correlations. All the loans went bad at the same time.

Default probabilities may be lower now than they were in the last cycle, but it's not clear that correlations have been reduced. And I think that leads us into the next area of interest, and that is the lessons of recent market events. And I think these market events, to some extent, are about correlations.

The first one we mentioned briefly was the fall of 1998 failure of Criimi Mae. You might want to comment on that one. And you might want to comment on 9/11, definitely a correlation risk.

MR. WORLEY: I'll start off. Fall of '98 had impact on everybody that was in the CMBS business. Most everyone in the industry was holding assets for a period of time. We accumulate, we securitize, we sell.

During that time, most everybody who -- with long assets were hedging by shorting treasuries. Well, when the Russian debt crisis occurred, everybody started going to the Treasury market, buying Treasuries. CMBS spreads decoupled from treasuries causing huge mark to market. Everybody that's in this business, we're all on mark-to-market accounting.

We took a lickin' during that period in the fall of '98. Now, most of that came back to us in the spring of '99. But people have learned a lot of lessons since then. Number one, at Wachovia, we view our best hedge as selling the loan. So we are very frequent issuers in the market, maybe the most frequent issuer.

Number two, we've changed the way we hedge. You know, we run different hedge strategies that are more correlated to CMBS spreads. You know, currently, September, you know -- in my recollection we have never done well in September. There's always something going on in September.

So we just kind of have a strategy within our organization. We run as short an inventory position as we can during this month, and we run our hedges as highly correlated as we can during this month.

And 9/11, the impact it had was very broad spread. The lodging industry got slaughtered. I think it was just a new paradigm in the business environment. We saw, I think the tech markets, I can't remember exactly when the fall of the tech markets came, but it was probably not too far after that.

So you'll see the Northern California, the Austins, and the Bostons, have all dramatically fallen off since then. And it's just been kind of a rebuilding time since then.

MR. LEVY: I think one of the real differences you see now with the advent of the CMBS market is that real estate has really become mainstream. In the old days what caused a problem in real estate was bad real estate and bad fundamentals, not enough leasing. And the losses and the problems in real estate were really real estate related.

In the "be careful what you wish for because you might get it, when we moved away from real estate being the red-headed step child over in the corner to being mainstream, what we found is that all of these financial issues started to affect us that really weren't fundamental real estate issues.

For example, we had a real problem with Y2K. It wasn't really a real estate problem. The Russian debt crisis really wasn't a real estate issue. 9/11 surely was, especially in the lodging industry. But we've had a lot of events that have caused the market to go up and down in pricing, but they haven't been real estate issues in many cases. They have been broad financial issues.

So the good news is that we're in the broad financial markets now. The bad news is that we're getting bumped sometimes by things that aren't real estate and that we didn't get affected by in the past when we were off of to the side.

MR. BERGER: John, I think your point is a very valid one. But that's really on the capital market side much more so than the real estate performance side. I mean, to me it's actually remarkable that as bad

as the fall of 1998 was on the capital market side, it really didn't affect real estate performance, the performance of the underlying assets.

MR. LEVY: No. But that's exactly my point.

MR. BERGER: Well, yes, and I agree. But even 9/11, the effect on delinquencies and defaults wasn't as bad as it could have been under other circumstances. And I think a lot of that goes to much better underwriting, much better transparency, and a much better mechanism to deal with the issues than we've had in the past.

You know, in terms of correlations, I think the loss frequency and loss severity is correlated to, as you said, bad real estate or loans that were made as real estate loans on operating properties, whether that was limited service hospitality or health care, you know, binary risk associated with single-tenant leases, and bad borrowers. Not bad, necessarily, in the sense that they were bad guys, but we've seen a significant number of problems with people who were just not professional real estate operators or had poor property management.

And I think there is some correlation, certainly Moody's has a study, about the loss frequency and severity in smaller markets, which we've seen in our portfolio as well.

MS. GORDON: Before turning to the correlation thing, on the 9/11 the only issue I would add is the impact on terrorism insurance, and that it raised costs and availability of certain kinds of insurance for some kinds of buildings, the owners of which thought themselves to be higher risk rather than lower risk, and created some interest shortfall issues, and so on. So the only thing I would add to the 9/11 is the terrorism insurance problem.

On the correlation, I think there are a couple of levels in which that can be addressed. And if we're talking in the bank regulatory environment, it's probably the correlation among property types -- does retail move the same as office, as multi-family, and so on? The correlation between markets -- does Austin move the same as Boston? And so on. Then, at one more level the correlation of commercial real estate, with, say corporate or C&I loans on a bank portfolio.

So there are a couple of correlation issues that could be addressed, all of which at all levels will be much easier to address now that we get data cranking through the system, and can do it analytically rather than with ceilings and floors.

To reinforce John's point, to be careful what you wish for, you might just get it. It is very clear that the cost and availability of capital to commercial real estate is now in part driven not only by the credit risk of the real estate, but also by capital markets events, which might have nothing whatsoever to do with a shopping center in Seattle.

The advantage of that is investor sentiment, and we haven't talked enough about investors here. I do hope we'll correct that, because they drive our market.

As investor sentiment shifts, Stacey used the splendid example of more operating-intensive properties, parking garages, golf courses, and as those perform less well, which they have by considerable margins -- considerable multiples actually, not margins -- investors say, "I see that deal, and it's got 10 percent hotels, or five percent of these miscellaneous oddball things. Get that out of my deal."

And it's not just the B-piece buyers, although they are certainly the most aggressive and vocal. Senior investors as well say, you want a bunch of hotels in there, and they are leveraged any more than 50 percent, that's fine, I'm just going to add two or three basis points to my AAA bonds, which are 75 or 80 percent of the deal. And the issuers' profit just walked out the door. Okay?

Now, you might sometimes think investment bankers are either arrogant or offensive, but they're not that stupid. If they just lost money on a deal that had a lot of hotels and parking garages in it, are they going to loan on more hotels and parking garages? I don't think so. And if they do, it's going to be very, very conservative.

So investor sentiments that favor or disfavor a property type, a location, telecom hotels to take another example, as those sentiments become apparent, they pass through the capital markets to the cost and availability of capital to those disfavored or favored assets in the primary real estate market. That used to take a year, two years, three years. It now takes a month, two months, three months. Okay?

So all of that is collapsed in time. That means that we are repricing risk, and there's nothing wrong with risk if you price for it. But we are now repricing risk at much more frequent intervals.

And we're on record -- I'll share the paper with you if you'd like -- and, again, we'll find out in five years if we're right -- that what we are likely to see in this real estate cycle -- it might be different for the next one, but in this one -- that the amplitude of the cycle will be shallower.

That is, shallower peaks and troughs, less big profits, less big whacks, but we will see more short-term volatility. Little blips as things move up and down, because of Criimi Mae, because of Russian bonds, because of Y2K, because of things that via the bond market now affect the cost and availability of capital. And we will always be a capital-intensive asset class.

So that those things affect short-term pricing, but that the long-term amplitude of the cycle will be shallower because we can reprice the risk more frequently, build it in, and we are repricing that risk-based on now \$500 billion worth of CMBS investors outstanding saying, "I don't think I like that. I like that."

MR. BROWN: So, Sally, doesn't it bother you that some of those capital markets effects might be highly correlated, like a 130 basis point rise in long-term rates that goes across the entire system?

MS. GORDON: Correlated with what?

MR. BROWN: Correlated -- have a similar effect on all properties across the country.

MS. GORDON: No. Because it gets granularized. It gets granularized very quickly.

MR. BROWN: And that gets back to risk-bearing that we talked about.

MS. GORDON: Yes.

MR. LEVY: I think the other thing on the investor side is you did have a huge run up in treasuries, and it crushed the MBS market. It was just a debacle. It did virtually no damage at all to CMBS.

In fact, I think I'll steal some Morgan Stanley numbers. I think their numbers said that through last week or the week before CMBS traded AAA 10 years, traded within one or two basis points for 17 straight weeks.

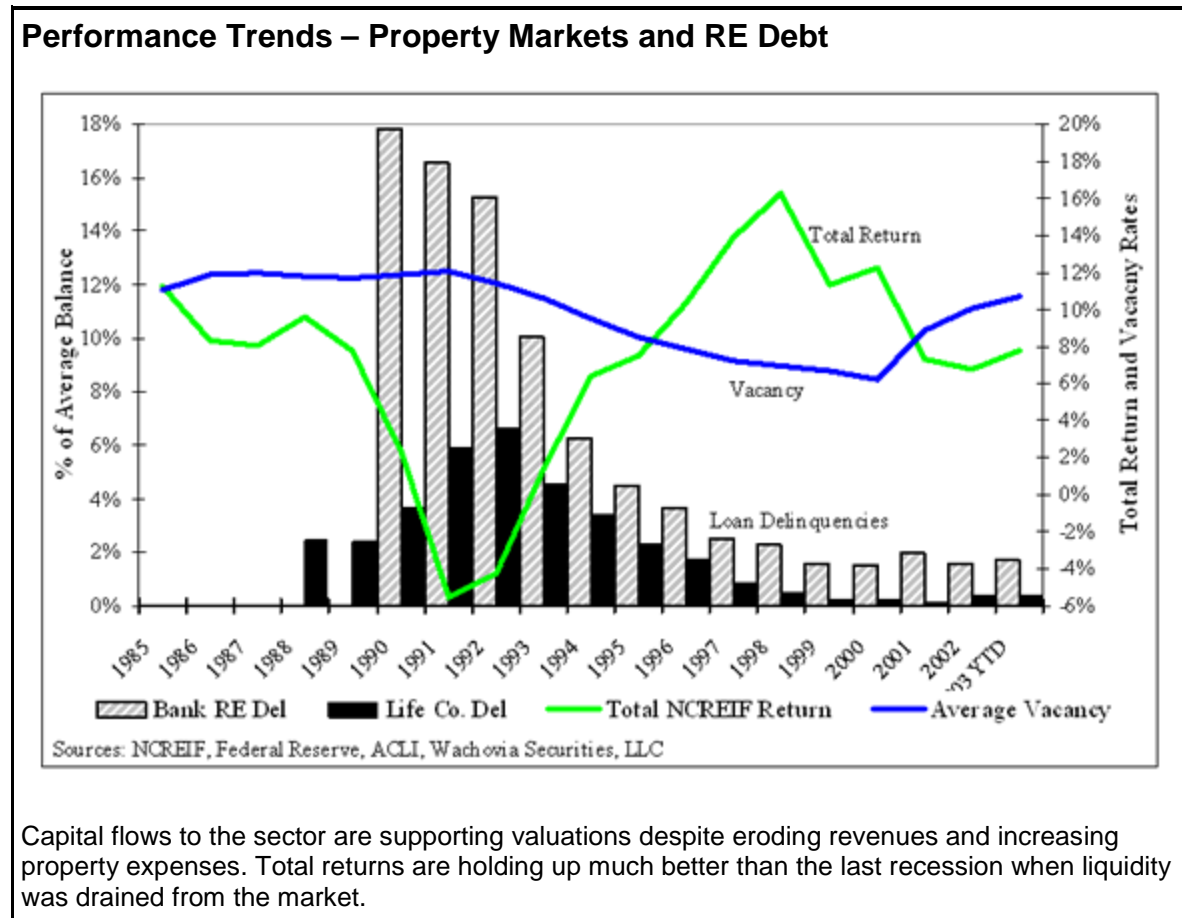
Really, real estate, commercial mortgage-backed securities have done awfully well in an extremely volatile Treasury rate environment. So how have we done? Pretty well. Not perfect, but certainly a whole lot better than those people who bought MBS and then had to rebuy it and resell it and rebuy it and resell it again.

MR. BERGER: Yes. I'd add to a point that David made earlier. On the issuers' side, issuers have done a much better job of managing their inventories and the hedges against those. Even in this volatile interest

rate environment you're not seeing embedded risk in the inventory that's sitting on dealers' books at this point in time.

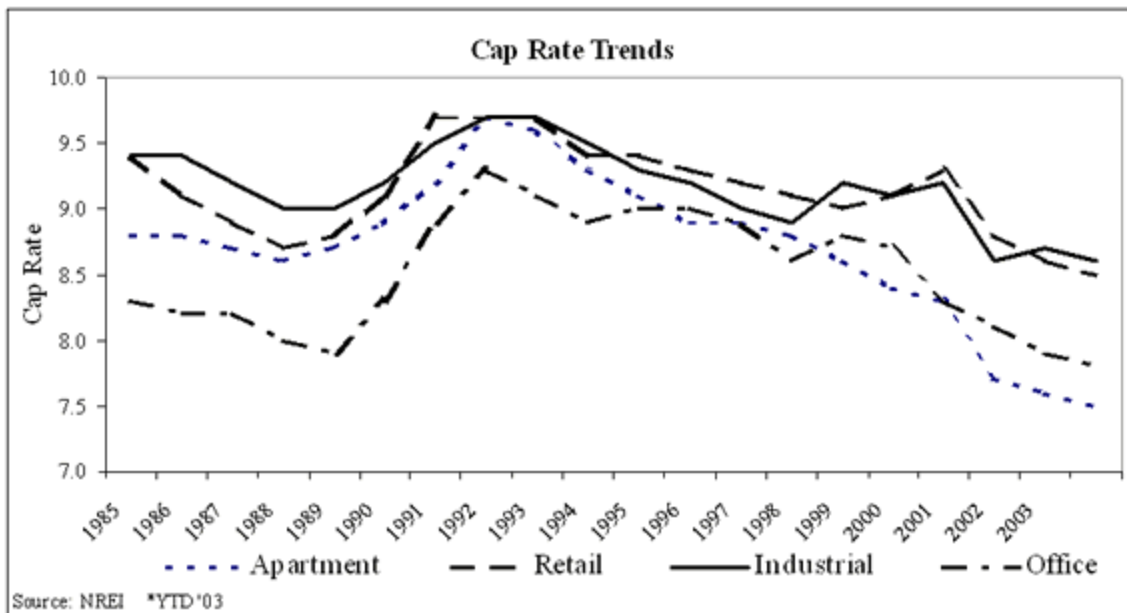
I know in our shop we got very close to where our hedges started being ineffective but didn't get quite there. So, again, the risk inherent in the business of originating and securitizing commercial real estate loans, a lot of which is held by, or is done by regulated financial institutions, seems to have been managed much more efficiently than it has in the past.

MR. WORLEY: Yes. I'd actually like to share a couple of graphs with you. Ron, if you could flip to my slide number 11. What we have, really, is a three-legged stool that finances the industry. It's the life companies, maybe it's -- go to the one before that. Yes. The banks, the life companies, and the CMBS markets.



Liquidity is a huge driver in this market, and this is kind of a busy chart. What it shows you over time is what property returns have done, total real estate returns have done, what vacancies have done, what delinquencies have done, both in bank portfolios and life company portfolios. If you'll recall, back in '91/'92, there was absolutely no liquidity in the market at those times.

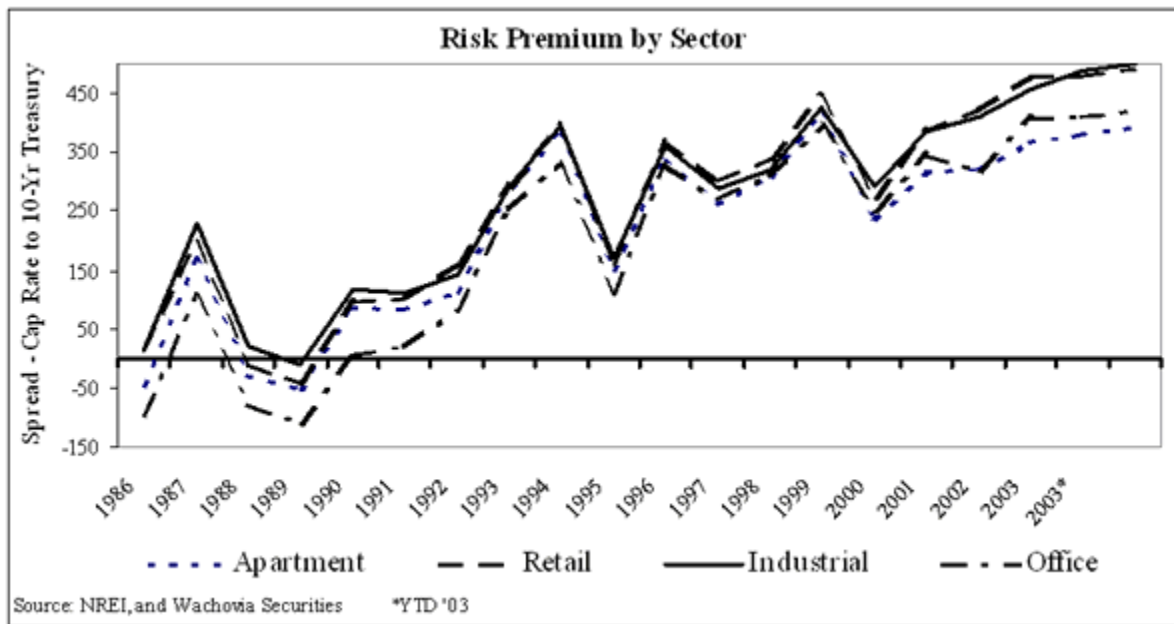
Now, if you'll flip to page 21, Ron, I'll show you what cap rate trends have done by class. And if you kind of look back in the early '90s, the cap rates -- you know, tied to liquidity -- people wanted huge returns to buy real estate.



- Prices are also being supported by borrowers willing to accept lower cap rates. This is sharp contrast to the last recession.

Now, you're saying, okay, was there -- did they perceive high risk in it? Maybe so. But if you -- you can see cap rates have trended down to their lowest rate in years.

If you flip to the next page, 22, this is something that I follow. This is -- what I call risk premium by asset class. This is the differential between the risk-free rate, the 10-year Treasury, and the cap rate for an asset class.



- Although cap rates are stable or continue to fall, capital inflows to the real estate sector continue to reflect the poor performance of alternative investments (such as equity markets and low bond yields).
- In short, real estate is still attractive given other alternatives. The risk premium is now the highest in 17 years even though real estate is in better shape than in the early 1990s.

Well, that spread today, even though, you know, we all say cap rates are unbelievably low, we're shocked they're so low, that spread today, which is the premium you're getting paid for risk and transaction, is the highest it's been, as you can see, in years, which probably tells you people still perceive, you know, based on vacancy numbers going up.

There is still a large amount of risk in the real estate sector right now, and that's probably why cap rates are as high as they are, just embedding a risk premium for that risk.

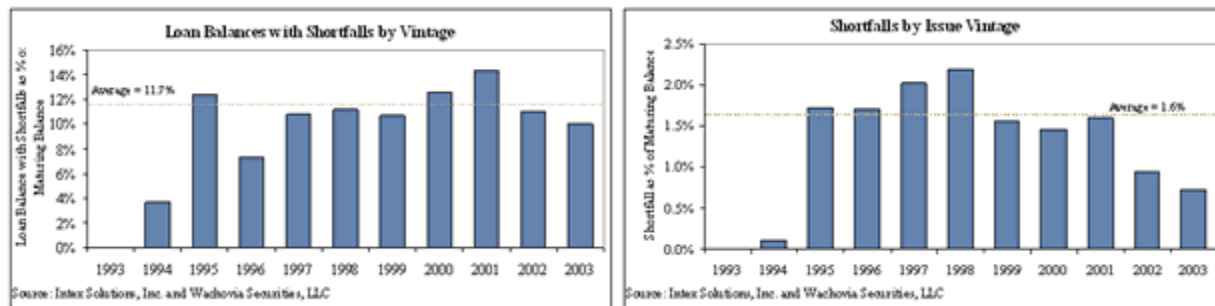
MS. GORDON: David, do you worry about the refinancability of those things, of the assets that were financed in an unusually low cap rate environment because there's been an unusually low Treasury environment, and treasuries can come back up a bit and absorb some of the squish that had built up, if you will, before commercial mortgage rates and cap rates moved the other direction. Would you worry about refinancing those? We sure do.

MR. WORLEY: Yes, it's interesting you ask that question, Sally. If you'd turn to page 37, Ron, we actually look at that. In a CMBS market, we run refinance analysis by vintage, and that will tell you the years that we think -- the vintages of CMBS where we think there are potential shortfalls.

Re-financing Risks Are Limited for CMBS Bondholders

Some Concerns

- Take-out risk should be limited given our interest rate outlook – maturing loans in 2004 and 2005 are at elevated balloon and extension risk.



- CMBS bondholders should be reasonably well protected from defaults and losses associated with refinancing risks. In analyzing 38,000 CMBS loans* we found that many loans will experience shortfall, although the average short falls are small (1.6% of loan balance, on average).
- Shortfalls were found to be wide-spread, affecting 73% of the 380 issues studied.
- Shortfalls, as a percentage of maturing balance are highest for loans maturing in 2004-2005, averaging about 4% of balance, or 3x the overall average.

*For further discussion, see our recent paper CMBS Performance in a Rising Interest Rate Environment, May 5, 2003.

Although we don't think it's large in any of the vintages, my loan balance -- I'm trying to remember the numbers -- 1.6 percent on average shortfall. I think that may be a larger risk in the bank market, because all of the bank loans are primarily floating rate loans.

And I'm not sure where -- you know, to what constant they're underwriting those loans today. But, you know, most of the loans in the CMBS market are, you know, fairly high -- the ones that have been originated in the last year or so, year or two.

So we're not as concerned with that in the CMBS market. I would probably have a greater deal of concern with the bank market.

MR. LEVY: On the origination side, I can tell you that there's not a single deal that we do that we don't run a stress constant, or, in other words, what's going to happen when this loan matures.

I can't speak for other originators, but to me that's one of the first things you do, because when we've had rates as low as we have you certainly don't want to make the assumption that they're going to continue, especially over 10 years.

The rating agencies make available these "stress constants" that you want to look at. Just to make sure that down the road you do have room. I can't speak for others, but I know we just do that as a matter of course, just to make sure that if rates go up we're still okay. Maybe not as comfortable as we are today, but we're not in a disaster either.

MR. WORLEY: Absolutely. And I think that's part of the discipline that the rating agencies bring to this process is I guess whether you want to do it or don't want to do it, they're going to tell you, and they're going to tell the investors what your debt service coverage is under stress constant scenarios. And so the

whole industry really is forced to live by that dynamic, which I think really is good and helps protect investors.

MR. BROWN: Okay. We've gotten a couple of questions about factors driving performance in the market. A couple of questions have to do with interest rates. To what extent has the drop in interest rates -- I guess this is prior to July -- prevented deterioration in the CRE credit quality by offsetting operating income declines?

And the other question has to do with regional downturns. How important are regional economic downturns now compared to where they were maybe 10 years ago? And more generally, what role do these downturns play in driving the investment returns?

MS. GORDON: Want me to take it regionally?

MR. BROWN: By all means.

MS. GORDON: Okay. Let me take the regional one, because I'm sort of biologically opposed to regional analysis. It's genetic. That's why I'm at a rating agency.

The tendency -- one of the things that a CMBS deal typically does bring to market, assuming this is a mixed asset pool, is some geographic diversity. And it's easy to say, "Oh, my loans are in California and Illinois and New York and Florida and Texas, and so on, and, therefore, they are diverse." They might be dispersed, but they may or may not be diverse.

Typically, a state -- and California and Texas would be splendid examples -- there is so much economic diversity within that state that to say 10 percent or 20 percent of my portfolio is in that state tells you almost nothing.

Instead, we feel very strongly that the analysis has to be at the MSA level, because then you can capture the difference between San Jose and Los Angeles or Bakersfield or whatever it might be, differences that get neutralized in a state-level analysis, and differences that almost disappear if you do it by region, meaning broad regions of the country.

For that reason, we do another -- whenever we're rating a deal, we're certainly looking at individual assets -- underwriting, the net cashflow that spins off. We typically assume an occupancy rate that might be lower than the one in place. We might assume a rent level lower than the one in place, in order to get us through some humps that might -- and bumps that might occur over several year horizons.

And once we come up with our net cashflow, we're looking at individual assets. Can they carry this?

At the same time, we're going to do some pool-level analyses. What is the combination of assets in this pool that might have -- and referring back to the correlation question -- might correlate with one another in ways that would not be immediately transparent.

The, sort of textbook example is if you had assets in Raleigh, North Carolina, Austin, Texas, and San Jose, California, you are certainly geographically dispersed east, west, and middle. On the other hand, since those three local economies are heavily dependent on the technology sector, they might well all tank out at the same time.

So your geographic dispersion does not protect you against economic concentration by industrial sector. For that reason, we look at the sectors that prevail in all 315 MSAs, then sort of turn a portfolio on its side, and say, "Do we have a dollar weighted concentration in certain industries that have reappeared in our Raleigh, Austin, and San Jose portfolio?" Which by our measure would get a very low diversity score,

even though it's geographically dispersed.

So we're going to look at economic sectors as well as geographic diversity. And by our view, region doesn't do it. It's not enough. You just regress to the mean and disguise too many important risks that you need to drill down to get at.

MR. WORLEY: On the other question, Ron, if you would turn to page 9. The question about falling interest rates buoying properties: You know, it's interesting in the CMBS market, there's a small component of floating rate loans, but for the most part the biggest part of the market is fixed rate loans.

So a rise or fall in interest rates, other than balloon and extension risk, this doesn't impact the people that are financed on the fixed rate side. If you're financed on the floating rate side, which as most of the bank loans are, you have been buoyed by falling interest rates.

If you look at this graph, you can see property revenues have fallen dramatically by every -- you know, every component of the -- of asset class -- apartment, office, retail, industrial.

Now, if you flip to the next graph, Ron, this shows the dichotomy between what's going on actually in the real estate market and what's going on in loan performance. You can see vacancies dramatically rising. You can see delinquencies, foreclosures still down next to nothing. And I will tell you that this is directly correlated to the very low interest rate environment.

MR. BROWN: Does the recent increase in long-term rates affect that going forward?

MR. WORLEY: Well, we've run some numbers. I will tell you for every -- if you're in a floating rate loan, kind of -- and it depends on, do you have -- you know, what coupon you -- or what spread you have, and whether you have amortization or no amortization. But just kind of a rule of thumb is for every 100 basis points of rate increase, you lose about 10 ticks of coverage, debt service coverage.

So if you had a -- you know, if you were on a floating rate loan with some amortization built in, and covering it 125 times, and, you know -- and I guess most of these loans are tied to LIBOR. They're not tied to treasuries.

MR. LEVY: Yes. But the real point here is that LIBOR hasn't moved.

MR. WORLEY: LIBOR has not moved.

MR. LEVY: When you're calculating your numbers, it's the 10-year Treasuries that have moved. LIBOR has done nothing. So if you've got a floating rate loan and you're worried about it, LIBOR is one, or, you know, thereabouts. LIBOR seems to vary by five basis points plus or minus. The 10-year Treasury has done the damage, and that's on the fixed rate side.

MR. WORLEY: Right. So, you know, you can just kind of pencil that in. Right now, most loans are tied to LIBOR, everybody hasn't -- you know, it hasn't impacted much, but as LIBOR, whatever index they're tied to moves, that's kind of the number you lose in debt service coverage, about 10 ticks.

MR. LEVY: Let me get back to interest rates just a minute and what that has done to values, and where that is keeping things current. We do have in a number of markets significant vacancies (inaudible)

The last time we played this game, when things were that vacant, there was blood in the streets. Why isn't there now?

One of the reasons there isn't now is because we do have low interest rates, cap rates are low, even though I agree with David that the spread is high. But when cap rates go low, that keeps the value of the existing properties up. So even though somebody may look and say, I think I have a cashflow shortage, the real question is, does he want to exert his put option and give the loan back, or the property back?

The answer is -- in the old days, the answer was sure, because the property loan and the property value were either synonymous, or the value was below the loan. Now, because of low rates, these values are staying high. Even if you have a shortfall -- and those are not unheard of -- you might think, gee, I'll feed this -- it's called the check of the month club -- for a while, because I don't want to give it back because there is real value in the property.

So low interest rates have had an effect. The other thing is that there is a lot of money chasing real estate, which is part of this same thing. Banks are very willing to lend you money. And I don't pick on banks, because institutions are also very willing.

So low interest rates have definitely played a huge hand, even though we've had significant vacancies in many markets.

MR. BROWN: Stacey?

MR. BERGER: Within our portfolio, we have a significant number of large floating rate loans that are relatively short maturities. They are typically two- or three-year terms with one-, two-, or three-year options. And we're seeing a considerable amount of stress at the property level in those, not stress at the loan level because of low interest rates. And, again, those are generally all LIBOR floaters.

We do have a pretty significant concern about the ability of those loans to pay off at maturity by virtue of refinancing. And so that's an area where I think you are going to see some stress in the CMBS market as these loans mature and can't refinance at numbers that will pay off the existing debt.

MS. GORDON: I think to add to the interest rate environment, I think another thing that has helped us is that in the last really bloody phase of the real estate cycle, markets were oversupplied. This time they are underdemanded.

The difference is that you can grow out of that, because the natural inclination of the American economy is to grow, maybe faster or more slowly, maybe at a more protracted rate or whatever. But the prospect that you can grow out of a demand slump -- and we've seen negative absorption numbers, and so on, that have been kind of unusual, reinforces John's borrower perspective in saying, "I want to carry this, because I think I can -- if I can hover for X period of time, I think demand will come back sooner or later, but not five years from now."

MR. BROWN: I think we're going to get a property outlook overview at lunchtime. But I did want to throw the question out to you all also -- how long is this down cycle going to last? And what are some of the big opportunities in the next couple of years for the industry?

And when do you do think we're going to see significant absorption in some of these markets, a lowering of vacancy rates? Does it take one year? Does it take five years?

MR. LEVY: I don't know. Right now we have a jobless recovery which makes it difficult to forecast.

MR. BERGER: Yes. It's really a function of employment.

MR. LEVY: I think it's an employment issue. We're not seeing people hiring. In fact, what's very interesting -- and this is just my little world -- is the number of people that I get calls from who are

unattached, shall we say. And it's really sad.

And that number, at least in my world, seems to be consistent to growing. So if we're having a recovery, and it's a jobs recovery, we just haven't seen it. And if we don't have a jobs recovery, there is not really a whole lot of chance that people are going to need more space, because space has some relationship to the number of people you employ.

And, yes, they can double up for a while, so we could be here a while. It's a little scary, frankly.

MR. BERGER: Yes. There also continues to be, at least in the office sector, significant amounts of subleased -- you know, vacant but leased space that--

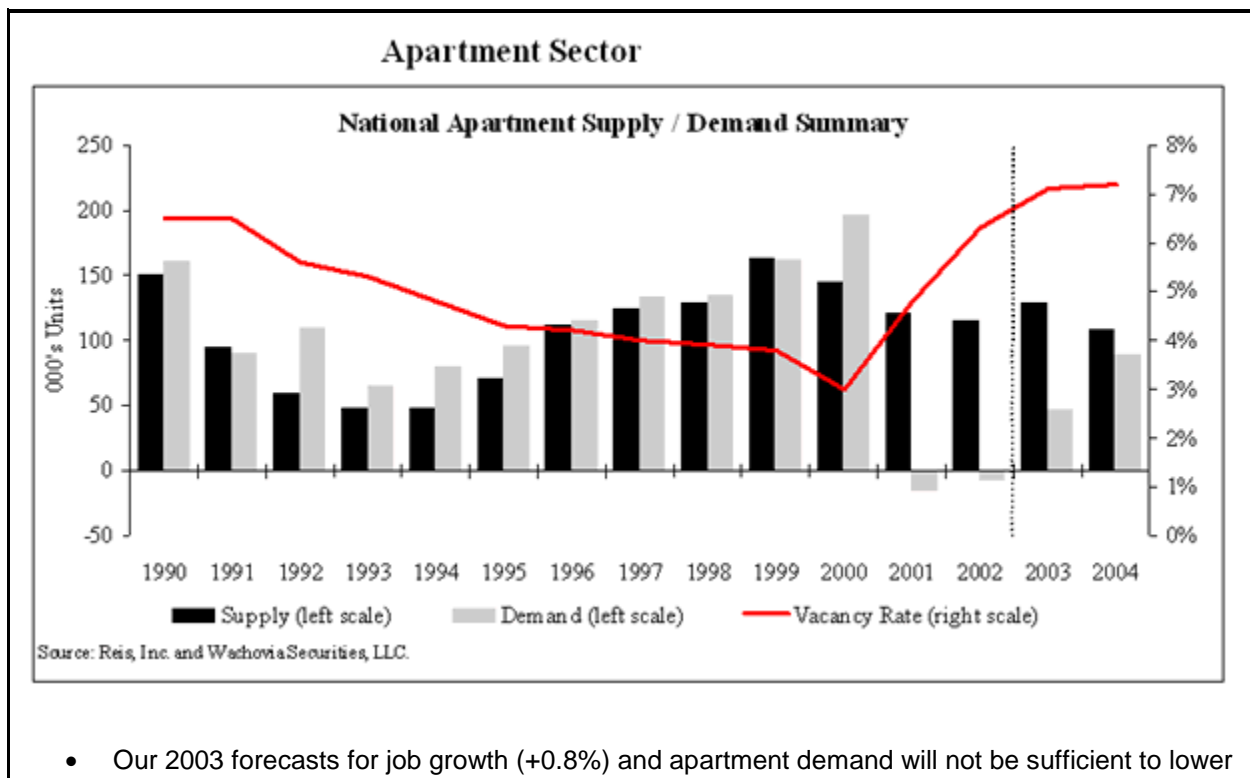
MR. LEVY: Shadow space.

MR. BERGER: -- shadow space that needs to be absorbed. And, again, that's all going to be a function of employment.

MR. WORLEY: Yes. I think from our perspective, you know, I'm not an economist, and I was almost a little embarrassed to post these numbers, but it's on the front page of The Journal today. Our economists -- and apparently a bulk of the economists nationwide -- have upped their GDP estimates for the rest of the year. We upped ours to five and a half percent.

So, but the real concern, I think like you said, John, is, is it a jobless recovery? And that's my fear.

Now, what we're projecting -- if you'll turn to page 25, I can kind of go through by asset class what we're projecting. But basically, a jobless recovery will -- has kind of -- still doesn't help the apartment and the office market very much.

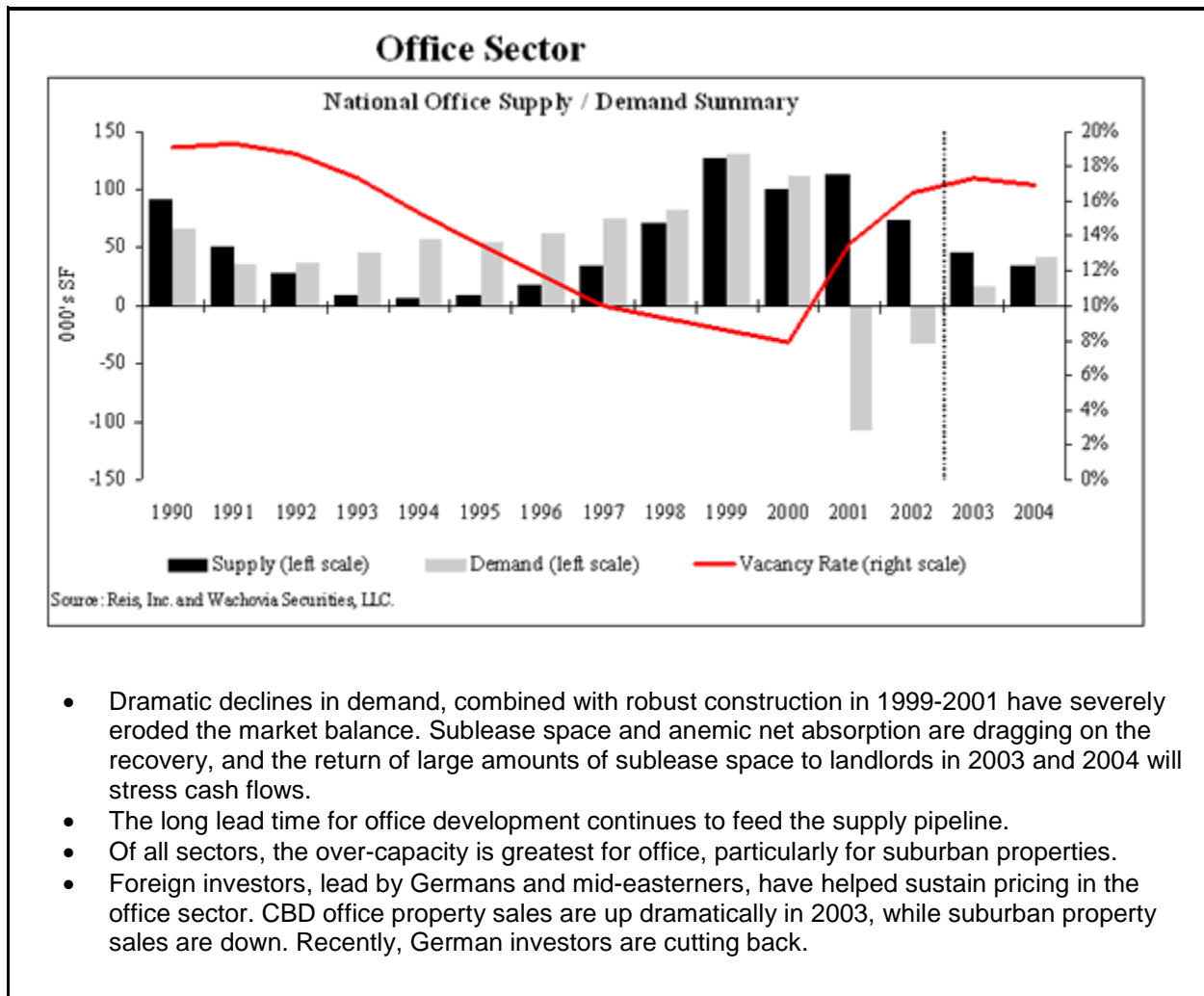


national vacancy. Further, without significant job growth, net absorption will be flat and vacancies will trend above 8% in 2004.

- Apartment supply growth has continued despite softening market fundamentals.
- Rising long-term interest rates will help increase renter demand as home ownership becomes less attractive .
- Apartment offerings are up roughly 75% from a year ago and sales are off by 15% YTD, signaling curtailment of recent strong capital flows to the sector.

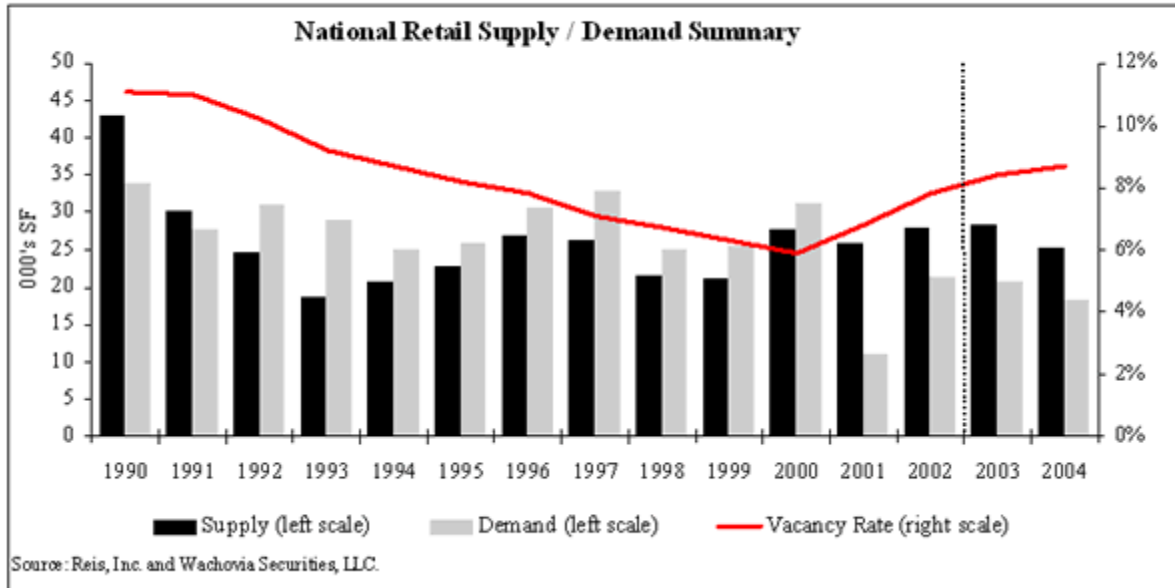
We're expecting the apartment market -- now, if rates rise, the renter by choice, we're probably seeing those guys not buying houses as much, so the renter by choice will probably opt to the apartment. So we're seeing vacancies probably rising a little bit and then kind of flattening out.

In the office sector, if you flip to 27, about the same thing -- over the next year not doing a lot, and finally maybe trailing off a little bit in '04.



Retail, if you flip to 29, we look at that maybe rising a little bit and then kind of flattening out. And then, industrial once again fairly flat. So we're not looking at a lot of movement in any of the big ones.

Retail (Strip & Community) Sector



- The fundamentals of the retail sector are most balanced of all sectors. Some over-building will lead to increased vacancies in coming years.
- Consolidation and tenant risk issues will continue to plague the sector. Additionally, as newer development chases roof tops, older centers will be challenged to maintain occupancy as the broad market softens and new centers cater to today's shopper preferences.
- Retail is the investment of choice for REITs and private investors. Prices and sales transactions are up for 2003.

MR. BROWN: And the growth assumptions behind these projections are essentially the same as the growth we're seeing now?

MR. WORLEY: Right. Right. The growth assumptions behind these are on page 4 of my presentation, which have rates moving up slightly and GDP recovering some, unemployment falling a little bit, and every 10 percent I think is about -- we're showing unemployment at 6.1 end of third quarter, down to six percent end of fourth quarter. Once again, I think 10 percent -- and you're the economist, but I think that's about a million jobs added to the economy. I'm a little skeptical of that. But --

Current U.S. Outlook							
	Q1 2003	Q2 2003	Q3 2003 (e)	Q4 2003 (e)	Q1 2004 (e)	Q2 2004 (e)	Q3 2004 (e)
GDP	1.40%	3.10%	5.50%	3.50%	4.40%	4.30%	4.40%
Unemployment	5.80%	6.10%	6.10%	6.00%	5.80%	5.60%	5.40%
CPI Inflation	2.80%	2.10%	2.10%	2.10%	2.00%	2.50%	2.70%
Fed Funds	1.25%	1.00%	1.00%	1.00%	1.25%	1.50%	2.00%
3-Month LIBOR	1.28%	1.04%	1.10%	1.10%	1.40%	1.65%	2.20%
10-Year Treasury Note	3.80%	3.54%	4.65%	4.85%	5.00%	5.20%	5.40%

Source: Wachovia Securities

- As a result, we continue to anticipate a modest economic recovery for 2003 and a continued jobless recovery. Our economics group has recently revised downward forecasts for employment growth.
- Given this muted outlook and limited signs of inflation, we believe that short-term interest rates will stay low in 2003.
- We do however expect 10 year Treasury rates to continue to slowly rise pushing up fixed rate CMBS conduit borrowing rates and permanent financing rates for real estate balance sheet lenders.

MR. BROWN: It depends on which series you look at -- the payroll or the household numbers. But, we are actually seeing a fairly optimistic economic scenario come about right now. Growth in the third quarter looks like it could be five and a half percent.

And also, the optimism of business executives, according to a survey released last week, seems to be coming back finally, at long last, with job growth still lagging. But even under these fairly optimistic scenarios, it's going to take a while to see some of the absorption come back in some of these markets.

MR. LEVY: In the origination side, or selling these loans, what's really interesting is if you look at the four food groups that we focus on, the apartment market is still very hot. You can sell or originate virtually anything you have. A year or two ago we were told that we were over-retailed and retail was soft. I'm telling you, that's not the case.

Certainly good grocery anchored stuff flies off the shelf. If there's any softness today, it's still in anything that looks like, you know, nursing home, hospital, that type of product, and hotels -- are still real concerns. Office buildings are priced higher. Industrial is priced somewhat less than offices, but certainly above real well-anchored retail and well above apartments.

So even though we do have a jobless recovery, these things sell very, very well in the market.

MS. GORDON: Yes. To underscore your retail issue, we do monitor delinquencies in the CMBS market, and we also monitor property markets. We have a report we put out every quarter that looks at individual property markets.

And the nature of this economic downturn made pretty big liars out of us on the retail sector. And we think what -- as in the markets performed better than we anticipated a couple of years ago. And we think the reason is that they've been fueled at two ends. One, households have drawn down more debt; and, two, they have pulled equity out of home refinancings, and so on, and, therefore, fueling consumer growth, consumer behavior.

So consumers have continued to buy, whether it's grocery stores or the CVS or the nail salon or the Chinese food store, or whatever, but they've probably not improved their balance sheets, either on the debt or the equity side.

So from perhaps a long-term perspective as a citizen, that might not be a good thing. But from the short-term point of view of the retail market, it has performed much better than it should have in this economic downturn.

MR. BERGER: Although, Sally, you know, some of that, interestingly enough, I'd be interested in your perspective, may be attributable to, just pure demographics and household formation that was much higher than anybody expected.

MS. GORDON: But that's part of the same constellation.

MR. BERGER: Yes.

MS. GORDON: Because usually household formations decline in an economic downturn. The kids stay living with their parents, people don't get divorced because they're not certain about their jobs. Everybody gets a job again, and, you know, the divorce rate goes up, they kick the guy out, and so on, and kids move out.

(Laughter.)

So that's part of the same constellation of consumer behavior that has persisted through the economic downturn as if there were none. So the problem is, when I talk to our single-family people and they have some data on what share of refinancings are cash-outs, they really come up with numbers more like 20 or 30 percent. I can't believe it's not higher than that, but --

MR. WORLEY: It has fallen off some this year as a lot of the equity has gone away. They have taken all of it out.

MR. LEVY: It's going to be interesting to see what happens with this. This is really where the long-term rate is going to have an effect, because we've been talking about whether that helps the single-family market. I've read where a number of the big nationwide single-family mortgage bankers have already started to cut people wholesale.

And the answer is add 130 basis points on to the long-term rate, and people that thought they were qualified or wanted to be or could take money out or liked the deal, that number goes down precipitously. It's money that doesn't get returned to the household, so they can't spend more money.

So now it's going to be a really interesting time from the single-family point of view, because now we're going to see how many people really want to refinance and were just taking advantage of that dip in rates. And I think a lot of people did. I can tell you personally I did. It was just an unusual opportunity. That blip down was a lot of fun as long as you caught it.

MR. BROWN: I don't know if this is a sign, but I just got a note that retail sales last month came in at 0.6 percent growth, whereas the consensus estimate was for growth of one and a half percent. So maybe we see a slowdown in retail sales right there.

MS. GORDON: But it's still got a plus sign in front of it.

MR. BROWN: It's still got a plus sign.

MR. WORLEY: Now, John, I would agree with you about multi-family flying off the shelf. But to Sally's point earlier, a lot of that is driven by what people are willing to buy, and a lot of that is driven by agency bids for that product --

MR. LEVY: It's going to be interesting.

MR. WORLEY: -- and give them what they want.

MR. LEVY: One of the things that will be interesting is whether this -- the noise, the chatter about Freddie Mac and others, whether that translates into a change in what they do. We personally haven't seen any indication of that.

But when you take the biggest single buyer in the CMBS business, which is Freddie, and if you said that they were to change -- and, again, I don't have even a scintilla of evidence that that's the case, which would be big news. And it certainly affects how multi-family would be priced.

MR. WORLEY: But the fact of the matter is we see this in our own servicing portfolio. I know I've sat on panels with Larry Duggins, and if he were here he'd tell you the same thing. Small multi-family deals and secondary and tertiary markets, we are seeing those things have issues.

If you'll flip -- let me show you --

MR. BERGER: Yes. One of the areas that we have a significant concern over in terms of new originations is older multi-families. We're seeing a lot of 25- and 30-year-old multi-families that are on 30 year ARMs that are being priced at very, very narrow margins.

MR. WORLEY: One of the things I thought might be interesting to you guys, if you flip to page 18 in my presentation, is we've kind of done a look at, by asset class, lifetime defaults and what loss severities are. And this is throughout the whole CMBS industry.

And when Sally says, you know, investors don't want to buy stuff, well, you can kind of figure out why. Health care. Look at that -- 13-1/2 percent lifetime default, 78 percent loss severity.

Now, it's a little bit different in CMBS land versus banks when you show loss severity. Loss severity includes carry costs, like all of the servicer advances. Whereas a bank would just put a loan on non-accrual, and when they charge off the principal balance they say, "Okay, I lost 30 percent," or whatever. They don't include in their numbers all of the loss carried that they had.

Hotels, 7.18, 48 percent loss severity, you know, on down the line here.

MR. LEVY: Actually, those numbers are continuing, which is interesting. If you look at the watch list, which is -- in CMBS, it's not the loans that are delinquent. It's the things that could be troubled. Health care watch list loans are in the 30-some percent range. Hospitality is in the 30-some percent range.

These trends that David has pointed out are continuing. That doesn't mean that every watch list loan goes bad. In fact, far to the contrary. But it's an indication of what might happen to these loans.

MR. BROWN: How much have they increased, John, the percentages that you just --

MR. LEVY: You know, I don't have those numbers in front of me. These are Trepp numbers, which is really a very good CMBS analytics firm. I did go back and look at them six months and a year ago, but I don't remember the specifics Rich. I'm sorry.

MS. GORDON: One thing that is different between the health care and the hotel sector is that we're seeing health care compromise a smaller and smaller share of CMBS. So they are burning off in deals and not being replaced.

Hotel is not burning off in quite the same way. It's continuing to roll through. So we're not done with that one yet. The snake is swallowing the pig on health care but not on hotels.

MR. WORLEY: One thing I would say -- and this is kind of my personal view, there is nobody that hates hotels more than I do.

(Laughter.)

MS. GORDON: Maybe us.

(Laughter.)

MR. WORLEY: We have stayed away from them institutionally for the most part. And if you look at our defaults -- it's kind of the hotels, and, you know, so shame on us for doing those.

But I do think there is an opportunity now, you know, if you are a market timer, there is an opportunity in the hotel sector, because there is very little liquidity in that sector. Revpars -- if you flip to page 33, revpars, as you can see, both on the luxury end and overall as an industry are rising. The dotted lines is where we were on 9/11, basically, so you can see we haven't gotten back to where we were on 9/11, but they're coming back.

So, you know, when I look at a market and I see very little liquidity and a need, then, you know, I can translate that into doing a very safe transaction that I can make a lot of money on. So there are opportunities, in my opinion, to do, and we will be banking on the B-piece buyers -- there are opportunities to very low leveraged hotels.

MS. GORDON: Rich, looking at the number of questions there, I think I should tell you I have a 4:00 flight.

(Laughter.)

We're not going to make it.

MR. BROWN: I was going to say that, too. I don't know if I've done a very good job of posing the questions to the panel. I've done the best I could to aggregate them. But maybe -- we've been at this almost two hours. Maybe we can switch up a little bit and go out to some live questions from the audience. You can offer your insights, your points for rebuttal, and maybe get some of your questions in that I wasn't able to get to the panel on your behalf.

MR. SIMONSON: I'm Ken Simonson with Associated General Contractors of America. I wonder if the panel could talk about how the evolution of these financial instruments has affected the construction industry. Has there been more sophistication about where to channel money? Are we seeing less severity in terms of overbuilding because people have closer real-time information about where the overbuilding has occurred? And so forth.

MR. WORLEY: I would say, our institution being probably -- you know, either the first- or second-largest construction lender, I think us and Wells probably have the two biggest portfolios. I would say absolutely my counterpart who runs that side of the business, they are looking at trends in every market. When, you know, they're looking at that, they're looking at pipeline, deals in the pipeline. They're looking at vacancies. You know, some of the research websites allow you even to drill down to submarkets to understand what's going on in particular submarkets.

So those kinds of dynamics are absolutely going on. Plus, I think there is a strong measure of pre-leasing required when people do construction to just kind of prove out what the market is.

MR. BROWN: That's a natural brake, then, on overbuilding -- the pre-leasing requirement.

MS. GORDON: The question is -- "Sally Gordon or all comment on the adequacy of the services provided by securitization trustees. As performance issues arise, are changes needed in your view?"

So far the trustees have not been a big problem. In fact, if anything, the whole CMBS structure market, all of the players -- servicers, originators, rating agencies, and so on -- are only now being tested as to

whether their functionality, effectiveness, analytics, performance in any number of ways will withstand some degree of market stress.

In general, the structures and the players have performed or survived quite well until date. I think if I had to point to something that might need to be changed in our view, there are some technicalities within the structures about the servicer advancing, and so on, which probably isn't as much of interest to this audience.

The other might be legal issues. We're sort of anticipating and holding our breath that different legal jurisdictions will reach different conclusions about this or that. And that will then need to be worked out and resolved. Meanwhile a property could be under some stress or draining resources from the trust, and so on.

So we're concerned about divergent legal resolutions which could take a very long time to reconcile.

MR. LEVY: On the borrower's side of the equation, we really don't see any questions about the trustees. The real question that major borrowers have is: if I do a CMBS loan, and I have a question two, three, four, five years down the road, how do I get it resolved? Who do I talk to?

These are servicing questions, and Stacey is an expert at this. But in the old days, if you had a question, you went back to the life company or the pension fund and you said, "You know, my tenant wants to expand. I need a little bit more money. And you don't mind lending it to me, do you?" And those things were worked out relatively nicely.

The CMBS structure doesn't really allow that. And it doesn't allow a release of some acreage, and it doesn't allow for other problems or changes. And real estate does change over time, so the biggest issue we see really has nothing to do with trusteeship but has everything to do with how these loans are serviced, both by the primary or the master servicer and by the special servicer.

MR. BERGER: Yes. John, that's really an excellent point. I mean, there are really two sets of issues. One is the restrictions that are put in place by the REMIC structure. And it's really a set of somewhat arcane rules that provide essentially a tax flowthrough vessel for CMBS, so that essentially there is no tax that's a consequence to the investors.

And the rules basically prohibit you from doing much of anything around the real estate itself or the collateral for the loans. You can circumvent that by how you write the loan documents. And there's more and more sophistication being introduced into the market by both the mortgage bankers who originate the loans, the issuers who are asking the right questions to the borrowers about what they intend to do, and the representation by borrower's counsel. Borrower's counsel is getting a lot more sophisticated in terms of knowing to ask the right questions about what you can and can't do.

The other side of the equation is that the servicers, to a large extent, are not identified to the borrowers up front. Certainly, institutions like Wachovia, who services -- who originates and services, you know, that is a competitive advantage. There are a lot of other originators -- the same with PNC.

There are a lot of other originators who originate the loans, issue the securities, and then the servicing rights are sold to the highest bidder. And borrowers don't know who their servicers are, don't know who the special servicers are, and what the conditions around the special servicer's approval rights, regarding assignments, assumptions, modifications are. In some cases, the rating agencies have approval rights.

Again, it's not very transparent between the borrowers and the servicing mechanism for the life of the loan. And there are a lot of -- there's a lot of work to be done to improve that over time.

MR. WORLEY: I've got a question here: "What happens when you meet a client that has unrealistic expectations for return about a particular market or risk relative to his risk preference? And what do you do if the whole market has such unrealistic expectations?"

It's a good question. It's a very easy question to answer because that happens every day. As an intermediary, borrowers definitely have unrealistic expectations. Buyers of bonds also have unrealistic expectations. And what we try to do basically, whenever we're pricing a transaction, negotiating a transaction, we work collaboratively with our trading desk. We know hopefully kind of where our transactions -- where Sally's agency is going to trounce these transactions out.

We're talking to the buyers of the bonds. We know about where those bonds will trade. We kind of know about how much money we want to make on transactions. So we put that into a filter, and that kind of tells us how we need to price a loan.

Then, we go back and try to work the client into getting his loan structured and priced where we need to get it to price the market, to clear the market at a number that provides us the required return that we'd like to have.

So that's kind of the way it works, and it's a little bit different. And this is what I love about the CMBS market. It prices risk accurately. The bank market basically -- you know, your end, Memphis, Tennessee, and you're competing on a loan, and you're competing with four other banks on that loan. And it's just whoever has the best bid for that loan wins that loan.

And there is not the sophistication into pricing the risk dynamics in that loan. It's just whoever, you know, has the biggest need to put an asset on their balance sheet at a particular time. So (inaudible)

MR. BROWN: How concerned should we be as regulators about some of those portfolios?

MR. WORLEY: Well, I will tell you I -- Silicon Valley is a great example. We own -- we try to transfer all risk. A lot of the investment banks will -- when we structure transactions, sometimes we create A notes and B notes, and a lot of the investment banks will aggregate an inventory of B notes, and at some point try to sell them.

We, for the most part, try to never do that. We try to sell everything day one. We've got one B note on a property in Silicon Valley. The deal was -- I think the total transaction was a \$100 million transaction. The B note was like \$30 million. The property is -- may be the 100 percent leased. It's a campus deal. Only 100 percent leased property in all of Silicon Valley.

It's cash flowing at debt service coverage of probably three and a half times, and I will tell you -- and I hadn't sold position, and we've marked it down substantially. And you're saying, "Gosh, why is that, David? That makes no sense."

Well, if you look into that market -- and this would be what would concern me about anybody who is holding debt in that market -- you talk about refinance risk. Most of the -- a lot of those loans were created when market rents were double to triple where they are now.

We've got very strong tenants in there at very high rents. Well, their rents roll, you know, probably about the time that this loan matures. So, you know, if I re-underwrite that to today's rent, looking out three or four years from now, life doesn't look pretty, and that's my concern about that particular market.

MR. BROWN: How much are rents falling when they roll over in some of these markets?

MR. WORLEY: Well, I will tell you -- and California is kind of a different example, because they always

quote rents per month out there. And I'm used to everybody else quoting on an annual basis.

But rent -- you know, we've got rents in a building at, you know, \$2.50 a foot, new leases being signed -- we just had one tenant, investment grade tenant, renew his -- his is the only lease that expires in the building until '08 -- renewed at \$1.05 a foot from \$2.50 a foot.

There are other leases being signed at 90, 80 cents a foot in the marketplace. So it's dramatic. I mean, it's -- you know, it's shocking.

MS. GORDON: In fact, another twist on your community banks lending in their local markets, and as another example of how the data that's coming out of the CMBS market now has the potential for analytical runs that weren't possible before, it's pretty -- the delinquency report we did last year showed this, and the one we're doing now reinforces it.

That the delinquency rate is -- almost increase linearly, if that's a word, the smaller the city. So that towns that are too small to be MSAs have delinquency rates that are multiples of average size. And it's almost a straight line, and it's across all property types.

MR. BERGER: Yes, that's very consistent with what we're seeing.

MS. GORDON: Yes. And we would speculate it's two things. One, smaller communities are less rich capital environments. There are fewer sources of capital. Life companies don't want to do the due diligence. It's just too time-intensive.

Secondly, they are shallower economies. So that one employer leaves town and it's liable to leave more people high and dry who now might need to move to seek alternative employment as opposed to being able to find something else locally. Well, they take their tennis shoe buying and, you know, going to the dentist and everything with them when they move.

So that -- I had a lot of old-time, hard core real estate people call after that and say, "I always knew that was true, but I could never prove it." Well, now we're getting the data so that we can demonstrate things that were not demonstratable before, because we didn't have the data load and the time series, and, you know, that would add a risk factor potentially to the Tuskaloosas.

MR. BERGER: Sally, one other thing that we see as a lower sophistication level in the borrowers, and more concentration of their assets locally. So we're seeing in smaller markets more borrower distress, because all of their assets are in a local -- or because they're not sophisticated real estate investors, and so as the market declines -- again, your shallower economy is affecting these borrowers in more ways.

MR. WORLEY: I mean, you know, I sit back and look at what -- you know, if I were an investor, what would keep me awake at night a little bit. My concern is potentially some sector rotation of liquidity out of this industry. If you look at the underlying dynamics of the real estate market, really what real estate transactions are, they're fixed income instruments. You're earning a fixed return over a period of time.

Well, if you think about fixed income instruments in an overlay interest rate environment, fixed income instruments do very well in a falling rate environment. We have capital flowing into this sector, have had unbelievable -- I mean, you look at some of these REITs, Wells REIT, Inland REIT. These guys are out raising literally \$100 million of equity a month to throw into the -- to invest in this sector.

When rates start rising -- and, you know, corporates have been off. You know, so, you know, we've been a beneficiary of a lot of other sectors not having good times. Corporates are starting to come back, and I've just got a fear in a rising rate environment you're going to see some sector rotation of liquidity out of this -- out of the real estate sector. That's going to drive cap rates up.

What it ultimately drives is lower equity returns, because rising interest rate when you refinance something or try to -- you have lower proceeds on your refinance, which means the equity guy has to dig into his pocket a little bit, it'll drive higher delinquencies, higher defaults. So, you know, and then, you know, underlying that is how much liquidity there is in the sector.

So that's something I think we all need to be cognizant of is watching the capital flows into the real estate sector.

MR. LEVY: You're really spot on that. But I also think that it really continues every day, because if you talk to the CMBS people, as we do, they'll tell you every day, gee, you know, you are not priced as well as ABS. For example, you're a little rich vis-à-vis credit cards.

The people that are buying AAA for the most part aren't real estate people. They are just looking for an investment. So they don't have a real estate feeling. They have a spread feeling. This is valuable relative to something else. This goes on all the time. It's not like you wake up one morning and everybody says, "I don't like real estate."

They say that to you twice and three times a day. Corporates look a little better, or they don't look a little better, or I'm back in MBS. So they're rotating all of the time.

But I think David really is right on. If commercial real estate took on the patina that it did in the early '90s when nobody liked this at any time at any price, it would be a huge problem. And we have been very lucky that real estate has done well, while corporates have not done as well. People are afraid of what so-called event or headline risk. Real estate is one of the things that they look to and say, "I don't have to worry about that."

So if all of a sudden we go back to the doghouse, it'll be uncomfortable, and certainly for us unprofitable.

MR. BROWN: Questions and comments from the audience?

MR. PUWALSKI: Early on Stacey mentioned -- I'm Allen Puwalski with the FDIC. Early on Stacey mentioned one of the important developments in the CMBS market was the sense of limits on servicer advances. And I assumed what you were saying, that's through non-performing status --

MR. BERGER: Yes.

MR. PUWALSKI: -- of the loan. Well, if it's the case, as the market has been described, that the -- it sounds like the B-piece holders are the ones who are expected to pay back those servicer advances if the loans don't cure.

MR. BERGER: Yes. Let me explain the mechanism a little bit better. The master servicer is responsible for advancing through their determination of non-recoverability. So, again, we on a monthly basis look at each loan that's delinquent that we're advancing on and determine -- make a determination as to whether that -- the next advance is recoverable or not. And then, if it is recoverable, we go ahead and make that advance.

The loss associated with -- so the advances are recovered, plus interest at prime, from the ultimate resolution of the loan. So ultimately the cost of those advances gets -- eats through the loss that the B-piece buyer owns.

MR. PUWALSKI: I guess what causes me some concern is that, you know, at some point if you make poor decisions about what you advance, then that risk of repayment is concentrated in the five or six main players in the B-piece market.

MR. BERGER: Well, I think -- I'm not sure that their -- their loss is really associated with the loss severity that's built into the credit risk that they're buying. So the advances add to the loss severity by the amount of advance interest that the servicer is adding.

So I don't think that there is any -- it increases the loss severity, but I don't -- but they aren't ultimately responsible for the advances. The advances are secured first by the underlying -- the recovery on the underlying asset. And then, if the master servicer makes an error and advances beyond the non-recoverability, then they have the right to collect from the entire pool, including regular P&I payments.

So we look at servicer advances as being senior in priority of recoverability to the AAA bonds. So they are very secure. That's not to say that you couldn't make a mistake on the last asset in the pool and advance beyond non-recoverability.

MR. WORLEY: Yes, I wouldn't be playing the violin for the B-piece buyers too much. I was kind of hoping Larry Duggins would be here, because he's a North Carolina guy that has ended up in Texas. And I'm a Texas guy that ended up in North Carolina.

And, you know, at the end of the day, hopefully, you know, I can get back into Austin or something, and that's a little slice of heaven. And, you know, I've died and gone to heaven, you know, if I've been a B-piece buyer for the last 10 years, because if you look at -- you know, back on page 19, that slide, cumulative CMBS lost is 15 basis points. Well, and that goes to that unrated piece.

Now, Sally and the rating agencies will tell you that those unrated pieces aren't even two percent. The B-piece buyers dictate that there's going to be two percent unrated in here, and they price that at about 28 percent. So I think you'd like to buy an instrument that you're making 28 percent on, and you lose 15 basis points over 10 years.

MS. GORDON: Yes. Let me reinforce that, again, don't weep for the B-piece buyers. But to return to the point that Rich made earlier, is risk being buried somewhere in this process that nobody knows about and it's going to sneak up on us? Or by entities unable to assess and price that risk?

The B-piece buyers buy into that risk up front. They know about it. It's clear. This does not come as a surprise to them. What we're going to be looking at more is that, yes, their yields have been sort of in the -- variously the high teens, high twenties pre-loss, mid to high teens loss adjusted yield. So these are handsome returns.

But if you think of, say, a single B bond, and if we rate 100 companies, or 100 entities that are single B, and if 35 of those blow up, we're going to say we rated them right, because that's what single B means -- over some time horizon, 10 years. I usually use 10-year numbers.

One year is going to be a very different number. A hundred years it's going to be a very different number. But if the B-piece buyers have had a wonderful run in the last several years, the question is: is the cushion such that they'll have lower returns in the next five years based on today's prices? I don't know. But I have a hunch they are going to be okay.

MR. BROWN: We've had a long, but I think very productive, session here this morning. And I think I'd like to wrap up and give you a chance perhaps to talk to some of the panelists offline or some of the other folks in the room here offline before we have lunch.

I want to thank the panelists for being willing to subject themselves to this process today. It's been a very freewheeling exercise, and it's one where we think that all of the issues can get mixed in and talked out. Clearly, there is much to go on. There is much to happen in the future in this industry as well.

And please join me in thanking them for their efforts and their insights this morning.

Immediately after the conclusion of the September 12, 2003 FDIC commercial real estate roundtable, the following presentation "Commercial Real Estate: the Big Issues of Today and Tomorrow" was given by Bret R. Wilkerson, CFA, Director, Property Portfolio Research.

Mr. Wilkerson: I want to thank you very much for inviting me here today, and Tom Murray as well. Very much appreciate the chance to talk to you all. I've been asked to talk a little bit about some of the things that some of the panelists were speaking a little bit about this morning in terms of the overall real estate markets, the fundamentals, and why the heck is capital doing what it's doing.

Forgive me if I take a little bit more of an equity perspective. If I offend anyone by saying things like volatility can be good, I apologize in advance. But what I'm going to talk about today are really what we think are the really true, really, really big things about this cycle that are defining the cycle today and then the cycle tomorrow as well.

So let's stay very big picture and look at returns. This is the kind of chart that a lot of investors are looking at today, and we were talking this morning -- there was some talk about how real estate is tied in with the broader capital markets, which is absolutely true. We're very much seeing that. Most of the types of investors are looking at those sorts of things as well.

They are looking at charts like this and they are saying, okay, my bond portfolio -- there's more room for rates to go up than down at this point. The stock market, my stock portfolio, it's up, but will it stay up? And then, they are looking at this chart as well and they are saying, "Bret, this chart is already way out of date. It's from the end of the second quarter, and the stock market and the bond market have moved dramatically since then." Well, the real estate market hasn't.

If you look at how real estate is measured, we've got three different ways to measure it up here -- NCREIF, which is a measure of private equity real estate; John Levy's mortgage index is up here; and NAREIT, which is the other red bar, which is our publicly-traded real estate securities.

People look at a chart like this and they say, "Gee, look at how real estate has done over the years, particularly in the sort of three- and five- and 10-year timeframe." On an absolute return basis, pretty darn good. In terms of volatility, pretty darn good as well relative to everything else.

And what role does real estate play in my portfolio? Or if I don't have any real estate in my portfolio, what role will it be playing? Well, the return volatility, very low, is definitely one piece. Real estate is viewed by many, and, in fact, is a hedge against inflation or interest rates increases.

It provides a lot of current cash return, which is something that you can't get in a lot of different places today. And the price support seems to be very solid. The values have held pretty well.

So absolutely, they are saying, you bet, I'll take some of that. So what are they doing? Well, they're playing. Transactions are up dramatically over the past year versus the prior year. We had a little bit of a slowdown in the second quarter, and in fact it looks like from the evidence we've seen from Real Capital Analytics data that transactions have slowed even more in the third quarter.

And part of that has to do, we think, with the players that were really flowing into the market in the beginning of this year and the end of last year. One thing that one of the panelists mentioned this morning was REITs like the Wells REIT, which is raising capital from private investors. These are new players to the real estate market. This is new capital coming into real estate.

So a lot of that is -- a lot of those investments we're using pretty high levels of leverage, and the change in interest rates has definitely changed how they can play in the game.

So it leaves some room for some of those that have been forced to sit on the sideline lately, which are the more traditional kinds of real estate investors, the pension funds, some of the foreign investors, some of those types of players. So the question then is: is it too late for them?

Well, looking at valuations, this chart has a lot of information in it, and a lot of colors, and it might give a few of you a headache. But let me explain it very quickly. We have color-coded some different major cities across the country and property types -- office markets in red, retail markets in green, warehouse markets in yellow, and apartment markets in blue.

The level of the color bar is the cap rate, which is in some ways the inverse of the P/E ratio. It's a measure of real estate value. The lower the cap rate, the more expensive the city or the property type or the building is.

Those bars all the way on your left-hand side, which tend to be retail and tend to be office, have little hatch bars on the top of them, meaning that the cap rates today are above the long-term average in a lot of those markets.

On the left-hand side, and you can see for every single one of the apartment markets in this graph, and in every one of the warehouse markets except for one, the little blue hatch bars are below, meaning the cap rates today are below the long-term average. So those markets look relatively expensive.

You can see sort of the spread of office, for example, the red bars -- I'll read a couple of these off to you. This is Washington, D.C., New York, Chicago, and Los Angeles. Sound familiar? Those are the places where all of the headline transactions have been taking place.

The markets all the way on the right -- San Francisco, Atlanta, some of the places that are viewed as incredibly risky -- are still relatively inexpensive today.

So overall though, in general, is real estate too expensive or is it, as we say in Boston, wicked cheap? Let's go to the fundamentals and the individual property types first, and then we'll get to that question.

In terms of office, as, again, we talked about this morning, we're not creating new jobs yet. We have gone through an unprecedented demand event, and this chart is actually -- it's amazing when you step back and look at it for a minute. The blue bars are quarterly change in supply -- new construction. The green bars are the quarterly change in demand absorption.

And we have just gone through a demand event that was absolutely positively unprecedented. The question about correlations again came up. This sort of thing has happened in most office markets across the country. Part of the reason that didn't happen in the last cycle is we had a rolling recession. There were a lot of different things that were going on.

But we went through an unprecedented demand event where vacancy rates have shot up to basically 17, 18 percent today, and 17.8 percent at mid-year.

We did see some positive absorption in the second quarter. It was not very much, but positive absorption at this point is something that makes a lot of people in the real estate industry pretty excited. And we're expecting a little bit more of that going forward.

In terms of the expectations underlying our forecast, we're expecting some job growth starting next year. Nothing huge, nothing major, and I'll get to that in a minute as to why, but enough that it will outstrip the

very small amount of construction that's underway today. We are only expecting office completions to be about 75 million square feet in total this year.

Office employment is definitely a piece of the problem, as is subleased space. This is another signal to us that we're scraping bottom today. Sublease availability, as reflected in that blue bar, has leveled off over the past year or two.

Now, granted, a big chunk of that is because it's turning into direct availability, which is a problem for some landlords, because the subleased space, even though it wasn't really occupied, it was paying rent. Now it's not occupied and it's not paying rent, and that's a problem.

So that's a reason why we think that there might be some increased pain in the office market in the near term.

The other biggest question that we get today, which is the big short-term question today, which is, where are the jobs? And, you know, where are they going to come from? We need them to fill space. This is the -- our calculation of office demand. You can see how great things were in the '90s, how we had the up and down, and, in fact, we really have basically in essence double-dipped in terms of employment growth.

Those jobs are, in our view, going to come from a wide variety of different areas, different sectors, from education and health and finance and professional and business services. And, you know, even though some of those numbers have backtracked in the August numbers that just came out, one of the reasons why we think that there will be some growth going forward is that corporate profitability is back.

You have to have profits before you can start to hire again. And companies are very reluctant to do what, in our economy today, is the number one expense -- increased jobs. That's a big reluctance of a lot of companies today.

So as that continues, and as the pricing power continues to increase, employee costs/wages have slowed, that growth rate has slowed, pricing power is now better, the growth rate of prices of goods and services is now better.

There will be some job growth going forward. The question is when. And I think pretty much everybody, at least in our industry, is expecting that. This is pretty typical coming out of a recession. In some ways, it's also completely unusual, because we've never had a downturn of this length ever in history.

But, really, what companies are thinking is you've got to get blood from the stone before you start to rock. We've got to really squeeze all of the productivity that we can out of people before we start to hire again to fill up the space.

So that's the biggest short-term problem today, which are jobs for the bodies that we need to put in the space. The biggest problem tomorrow and down the road in the office market is finding those bodies themselves.

The labor force growth in this country is going to go to zero. We're going to have an incredibly low labor force growth, and it's just simply a function of demographics. As all of the baby boomers start to retire over the next five, 10, 15 years, unless we start continuing to work to a later and later age, which for everybody in this room that's of the baby boom generation, can you raise your hand if you're planning on working past 75?

(Laughter.)

Okay. We've got a couple. We've got a couple. And interestingly, I've been asking that question for the

last couple of years. As people's 401K's have performed the way they have for the last couple of years, I've seen more hands.

(Laughter.)

But over the long term, what we then looked at was because of this problem with demographics, because labor force is going to drop to basically zero over the next 15 years, what will happen in terms of construction in the office market?

Well, the first thing you have to do is look at the cycle in the '80s. In the '80s we built, on average, 180 million square feet of office space a year, from 1982 to '92. In this most recent cycle, up through the bottom that we expect in '05, a total of 75 million square feet per year.

We then ran two scenarios. We looked at the growth rate of the labor force that was only at the working age population, which is scenario one, and then another scenario where we did assume some delayed retirement, some reentering of the workforce, actually pretty aggressive assumptions. That's scenario number two.

In reality, we'll probably end up with something in between. But what this suggests is that we built half as much space in this last cycle as we did in the cycle before, and we need to build half as much again in the next cycle. That's a pretty powerful thing, if you think about it.

In fact, when we first came up with these numbers, and I wrote up a memo and sent it to a client who is a developer in Texas, he called completely depressed and couldn't figure out whether it was the memo or the fact that he couldn't find a scotch in his office that he had misplaced.

(Laughter.)

It's a big issue long term.

In the meantime, because of that potential issue, what is that cycle going to look like over the next year or two or three or five? Well, sales volume recently has been very strong in the first half of the year.

What's trading? Well, the headlines have been the GM building, the big profile buildings in the hot markets. Capital is starting to widen its net to long-term leased, brick-backed bonds, even in places like Austin and places like that that capital generally doesn't like. But they are viewing these sorts of assets, 100 percent leased-to-credit tenants, as bonds. Pretty reasonable, pretty attractive, backed by something that is very likely to have some sort of value at the end. The question is how much.

Capital is widening its net a little bit, like I said, but really what's trading are things that are very well leased. In fact, 60 percent of the office deals year-to-date tracked by Real Capital Analytics have been 90 percent leased or better. Sixty percent of the buildings aren't all 90 percent leased or better. So that's really what's been trading.

Also, increasingly a little bit, some assets with some rollover, but those typically are in top-tier marketplaces, like Washington, D.C., places like New York, and in markets where there is some expectation for growth.

This is a chart that shows some of the things that a couple of the panelists were talking about this morning, in particular cap rates and spreads. I'm going to show a few of these, so let me explain for a minute. The blue lines here are the level of NOI, net operating income.

The red line there is the level of the cap rate. And then, on the bottom, all the interesting stuff -- again, it's

on the bottom, right? The spread against the vacancy rate.

So what's this telling us? It's telling us a couple of things. In the office market, NOI has been falling. For pretty much two years we've had falling incomes. We think that that's going to slow, and then reverse probably in 2005.

The rolldowns from in-place rents and vacancy will start to end. Next year will be a pretty bad year in terms of NOIs, but then after that we've seen rent growth slow and that should start to end. Hopefully, at that point, because activity is already up, we'll have hiring up, and we'll have some better things in terms of absorption, which will help steady and push rent growth at that point. So NOIs look to be at a pretty low level cyclically this time.

Cap rates, if you look at where they are versus the 20-year average over the last 20 years, they are pretty high -- 8.7 percent or so. They've gone up. They've picked up recently. We're definitely up over where we were in 2000, and we're way up over where we were in the 1980s.

So cap rates -- in general, they feel pretty tight to a lot of people today. They feel pretty low. But that's relative to coming off of where we were coming off of in the last cycle. At the bottom of the cycle we were at cap rates well over 10 percent.

So the cap rate is high. The NOIs have fallen, but they are starting to turn around. And the spreads remain incredibly wide, which is a recognition of a couple of things. One, that it's not an easy market to lease up in. It's not an easy market to manage in. It's not an easy market to own buildings in.

So the spread versus the vacancy, which has been rising -- as you can see, the vacancy rate has been rising. The spread has been rising. So there's a definite tie-in between the spreads and the pricing of real estate and the fundamentals still. There are some people that are saying that the pricing is insane. It's not. It's in sync. Big difference. In sync with both of the capital markets, as we were talking about before, but also the real estate fundamentals.

In general, what we're telling our clients now is those buildings and those deals that were done a couple of years ago, there is definitely some risk, as you're rolling off of rents that were crazy. Not a lot of those rents were underwritten as crazy, but there will be some pain in those deals.

Those deals done today we think are in pretty good shape. And, in fact, we're encouraging a lot of our clients on the equity side to go out looking for those buildings that have some vacancy in them, because that's what you really have to do.

Price is very bifurcated in the office market today. Those buildings that are very well leased up in great markets are very expensive. Those buildings with hair on them that are 60 percent leased in not great markets, they are just either not trading or they are trading at very high cap rates. So there is definitely some opportunity there from an equity perspective.

So quite the opposite we think is actually occurring in the apartment market. It was incredibly interesting, some of the comments this morning from the panel on the apartment market. The fundamentals are still absolutely positively struggling. Vacancies over seven percent, 7.2 percent of mid-year in fact, and demand on pace for absorption nationwide of 122,000 units. That's what we think we're going to end up with this year -- 120,000 new units. Remember that number.

The problem, number one, is that -- is probably number one today, which is we don't have the renters. We have college kids that are actually, when they graduated, planning on living at home, which is not typically what happens. That's not a good sign.

We have had a lot of renters by choice and a lot of other renters that typically hadn't been able to afford a home now owning their homes, which has definitely also pulled people out of the apartment market. And those people aren't renters anymore; they own their homes.

And then problem number two -- so we have a big problem on the demand side. Problem number two today is on the supply side. So we have a demand problem and a supply problem. This is not sounding good to me so far.

On the supply side, we have had inventory grow last year by 1.4 percent. Last time we had vacancies of over seven percent, supply grew by zero. So a lot more supply in the apartment market today, which is really affecting in large part the low growth -- I mean, the low barrier to entry, high growth markets, places particularly in like Charlotte, Orlando, Dallas, and the southwest, and some of those sorts of areas.

In terms of construction, we saw a little bit of a slowdown in the year ending in June of '01, and then another three percent last year. But, in fact, we've seen starts over the last six months increase by two percent. We've seen permits increase by three percent. Not good behavior.

If you take out condos, which is a big piece of what's going on in multi-family construction today, it's about 30 percent. It was about 20 percent a year and a half ago, 20 to 25 percent. It's now 30 percent today. If you take out condos, which last time I checked in a lot of markets you could rent condos, so they are not completely out of the market, multi-family construction starts or apartment construction starts at that point are down five percent.

Still, nowhere near the behavior that we've seen in the other property types. And still at a level of about 200,000 a year -- 200,000 new units a year, 120,000 new renter households a year, and a record level of vacancy rate. It's really sounding even worse, isn't it?

Well, it's going to get even worse than that in the near term. Not encouraging.

We are seeing, in terms of renter households, this looks at the renter -- number of renter households, the level of renter households by age cohort across the country. There's a lot of talk about how the echo boom is going to help. The echo boomers are going to sweep in, start renting all of these units and save the apartment market. But they really -- they are only aging a year at a time. They are not aging fast enough.

(Laughter.)

Which is a problem for developers. They are going to be -- it's going to be probably five or six years before the echo boom comes in and really starts to help. In the near term, the sucking sound that we've had in terms of renters, household growth being pulled back by the single-family market, has been a problem as well. And those people are just -- are now out of the market.

So those people that were in this 35- to 44-year-old age cohort, in large part if they are renters there they are renters by necessity. Typically, you own a home by that point if you're going to. And the people on the later end of the 25 to 34 age cohort, there are less of them today because they own homes.

In fact, according to the National Association of Realtors data, the average age of the first-time homeowner has fallen from 36 to 31. It's a huge drop in the last 10 years.

So we have a problem on the supply side and on the demand side, and we have the echo boom, which is only aging at a certain rate. If you add up all of these numbers over the next 15 years -- and this chart goes out to 2015 -- we go from a total of 34 million renter households today to 37 million renter households in 2015. That averages 200,000 a year. That's what we're building today at a record level of

vacancy.

And so we definitely have some problems here. The question is: what is it affecting? A lot of clients that we're talking to are saying, well, we're safe because we own Class A product. It's the best stuff out there. It's where people want to live.

And the spread between Class A and Class B has narrowed, so people can afford to live in Class A. Okay. That's a valid argument. The people who own Class B products are saying, well, we own Class B. These are renters by necessity. They have to live here.

And so these are the kinds of people that were not really -- aren't affected by the single-family market. These are the kinds of products that aren't affected by new Class A stuff, in terms of what's being built.

Okay. Well, that's a valid point as well. What really is happening is this spread has gotten narrow. The Class A units are going to win the occupancy game over the next year or two. Absolutely. The Class B product is going to lose the occupancy game, but nobody is going to be able to push rents, because we just don't have enough demand.

So no one is going to be able to push incomes. We've got a demand problem. We've got a supply problem. And we have unbelievably overpriced real estate. We have NOIs that have fallen for 10 straight quarters, falling income streams for 10 straight quarters. Pricing has gotten even more aggressive every single one of those 10 straight quarters.

It's just not making any sense. We've been to this movie before. It doesn't have a good ending. And part of the reason is because the stuff is flying off the shelves, like the panel was talking about this morning. People are buying it because it's perceived as a safe investment, because over the long run the valuations don't change that much.

That's part of the reason why cap rates have fallen so low is people are -- that were paying \$60,000 a unit a year or two ago are still paying \$60,000 a unit. The NOI has fallen off a cliff, but we're still paying basically by -- for the same amount. So big problems in multi-family we think.

The question, then, is are all of the apartment markets across the country overpriced? And the answer is yes.

(Laughter.)

It's pretty simple. This chart looks at cap rates versus the historical average. There are actually two cities in the country -- and I don't know if I believe the data about Dallas -- two cities in the country where cap rates are above the long-term average, Las Vegas and Dallas. Investors hate Las Vegas. They don't want to go there. It's too risky of a bet, even for developers. And Dallas is one that's notoriously a market that's overbuilt.

If you look all the way on the left-hand side, we've got markets that are very, very aggressively priced led by Washington, D.C. Good demand side story, more difficult to build here, so pricing has gotten incredibly aggressive. So apartment pretty much is really, really, really scary.

Capital flows have started to slow. A lot of the people who were buying multi-family were private investors. They've been squeezed a little bit on the interest rate side. The kinds of stories that I've been talking about here in terms of supply, in terms of demand, the word is out on those.

And what I think is going to happen is capital moves in a herd, right? It's all in apartment right now. It's all coming out over the next six to 12 months. We're going to see a blood bath in the multi-family markets.

This is the scariest place in the real estate markets today.

So office looked attractive. Apartment doesn't look attractive. Retail is just right. Sort of like the Goldilocks -- it's either the Goldilocks or the Hare and the Tortoise. I really can't figure that one out yet, but it's one of the two. Steady as she goes.

Retail sales have been pretty good, even if they were slower in the numbers that came up this morning. Still pretty good over the last six months in particular. We had some pre-war consumer jitters. We've been better in the last six months than in the prior six months. There are clearly some risks today.

If the jobs don't come back really pretty much this fall, the consumer will freak. Not a good thing. If some of the risks that are out there that everybody knows are out there -- terrorism, wars in another place come to fruition -- the consumer will freak. No more mortgage refi's, and, in fact, delinquencies are up, the consumer could freak. So there are definitely some big issues here in terms of the consumer, in terms of a risk.

But there have been some good reasons why we've had good retail sales. A couple of those were touched on this morning. There is another one -- a big underlying reason why retail sales have been so good over the past couple of years. And it gets back to the old retail mantra -- it's bodies times dollars.

We have more people in the 35- to 54-year-old age cohort in the country today than we ever ever ever have before. That age cohort is the age cohort that has the highest propensity to spend, which is great for underlying retail sales.

Now, some of the people that -- it's them spending, it's their kids spending, it's a lot of different spending. But we've got that age cohort increasing through 2007 -- a great underlying reason. It's pure demographics why we have people who are in their highest income-earning years spending a lot of money. So that's a good underlying reason. After 2008, we've got some longer-term problems, but for the next five or six years that's a good reason why retail sales should remain pretty strong.

And so where are they spending? Well, they are spending at the discounters. They are not spending at the traditional malls and the traditional grocery stores. This is not a cyclical thing. This is not a slow economy or a recessionary thing. This chart goes back to 1987, and you have the discount department stores and the warehouse clubs and the superstores -- the blue line -- gaining from 40 percent to now 70 percent of market share.

You have the conventional national department stores going from 50 percent to less than 20 percent today. Big, big, big shift. Things are a lot cheaper for the consumer if they buy them at the discount store. The consumer gets the concept of supply chain management. They get the concept of everyday low prices. They don't like the concept of going to the traditional department store and spend -- buying a whole bunch of different things, not having a cart to put them in, and going to a different line for every single thing that you buy.

They love the concept and the retailers love the concept of the big cart that you can take and fill with all kinds of stuff and buy more than you really thought you were going to buy. It's good for the retailer. It really is.

These guys are hitting both the malls and, in fact, in some ways and in some places -- and there have been a few instances in downtown L.A., in New York, in Metairie, Louisiana, where the discounters have taken old mall space, old Macy's space, and those sorts of things and become the new anchors in the malls. So that's a good thing.

These guys are also hitting the grocery stores. There's a lot of capital still chasing grocery-anchored retail

because it's perceived as a safe bet. The margins on -- for grocers are incredibly thin. And a lot of those margins are made on dry goods. These guys sell dry goods in mass, and so, you know, you buy your kitty litter here. You don't buy it at the grocery store anymore, pretty much everybody.

Retail construction is not driven by the consumer. It's driven by the retailers. So we haven't seen as good a behavior in terms of supply shutting down as in the office market, for example, but we wouldn't have expected that. Starts were down 10 percent, and then one percent, and they are actually up a little bit over the past six months.

And the reason for this is that there is historically in retail a very low volatility of supply. We are always building new stuff in retail, because the retailers are driving. And the reason retailers drive the new construction is they ask themselves the question, okay, same store sales are down. Let's build more stores. Or let's build different stores. Or let's build bigger stores. The retail format is always changing.

So in the near term, while there are some concerns about the consumer, over the long run and tomorrow and the next day and the day after that, the big question with retail is going to be: what's the next format? Because whatever the format you're in today isn't going to be the format that it's going to be 15 years down the road. That's just the way the retail game is.

If you look at, then, the different formats, and what's happened lately and where the capital is going, we've got malls and community centers, neighborhood centers, power centers, and retail in general here.

Both the current total return -- and, again, these numbers are from NCREIF -- the blue part is the income return, that's the change in value annually. So the first bar for each is over the last year. The second bar for each is over history. A couple of interesting things here.

First off, this middle chart, these neighborhood centers, which typically are the grocery-anchored stuff that a lot of capital is chasing and a lot of lenders like and a lot of developers like and a lot of pension funds like, over 20 years zero change in value. Pretty good income return, but zero change in value.

There is a lot more room for value growth in some of these others. In community centers and in power centers, in particular, most of the capital that has been flowing to retail had been flowing to neighborhood centers and malls. It hadn't been flowing there really until the last 12 months.

And then, hey, look what happens when capital flows in mass. You've got double-digit returns -- 16 percent returns, 14 percent returns -- across all different kinds of retail. Capital absolutely loves retail today. It's become very much the new darling of investors.

So, again, one more time with this chart. We've got NOIs because of a lot of the reasons I've talked about before in terms of the consumer and the age structure of the population. NOIs have been rising pretty steadily actually since the early '90s. This is why I made the hare comment earlier -- no big cycle here, just pretty steadily rising NOIs.

Well, cap rates have been rising pretty steadily as well, so we've got a rising income stream that we're pricing less aggressively for 15 years, for 12 years. Over the past about six quarters, we have seen cap rates come down a little bit. But versus the long-term average, we're pretty darn close to a record high in terms of retail cap rates on good NOI streams that will continue to grow. Retail seems pretty safe. You have also this spread at pretty much a historical high over the past couple of quarters.

Again, like office, that spread didn't come down as much as interest rates came down. So today we're pretty much in the same place that we were about nine, 12 months ago.

So then moving to warehouse, which retail has become less opportunistic and much more good blocking

and tackling kind of real estate, warehouse is the same kind of thing and is very much known for that. Looking at supply and demand, vacancies again jumped dramatically over the -- since the recession began to about 10-1/2 percent today from seven percent then. Completions this year should be half of the level they were in 2000, so, again, great behavior on the supply side in terms of overall shutdown in supply. That's good.

And so it looks like things are okay. Absorption has actually been rising for the last six quarters. It's been moderate, but it's been headed in the right direction. So things look okay in terms of total fundamentals.

Looking at what's driving that absorption, we have a lag between the retail sales, which have been pretty good, and between inventory replenishment. Inventories were drawn down in the second quarter for two reasons, one good and one bad.

The bad one was the sort of pre-war manufacturer jitters of we're just not going to replenish inventory, because we don't know what's going to happen. The good reason is that retail sales were higher than people expected. So you combine those two things; you draw down inventories quite a bit.

We need to get cranking again. And, in fact, if you look at some of the data that has come out recently in the past couple of months, it shows some decent signs for manufacturing. Over the long run, manufacturing is still in trouble, but the bleeding appears to maybe have stopped in the near term. We need to start replenishing the inventory.

What is being built, then, out of the stuff that's being built? Two-thirds of what's being built in the warehouse market are build to suit. Of that two-thirds, 40 percent of that are the discount retailers. It's unbelievable how much of this market is being driven by that same story we were talking about in the retail market.

Overall, starts are down 40 percent in the last years -- in the last two years, I'm sorry -- but the big chunk of this is -- are these big box build to suit by the discounters. So two-thirds of the recent construction has been build to suit. It's been the discounters, and it's been stuff that is I guess in a new category of warehouse, which we can only call "ginormous."

They are a million square feet and above, a lot of these, in a lot of places. During the 1980s, a million square feet and above warehouse projects, there were only 13 of them built -- 13 during the decade of the 1980s. There were 52 during the '90s. There have been 44 so far in this decade. So a big change in what's going on in terms of the warehouse market.

And why and where is this happening? It all has to do with technology, with logistics and the way companies are managing their supply chains. This chart looks at the six -- five or six, depending on how you count them -- major warehouse markets in the country, which are Atlanta, Chicago, Dallas, Northern New Jersey, and then the Inland Empire, L.A. basin area.

Those six markets account for basically a third of all of the warehouse markets in the country, which is an astounding number in and of itself. This chart is very interesting to me personally, because it has both an inflection and a crossover, which is always cool for an economist.

But you have --

(Laughter.)

You have a drawdown in the total inventory of supply that occurred during the '90s, as places like Memphis, as places like Indianapolis, really tried to emerge. And they did; they built a lot of space. They just didn't get a proportionate amount of the demand.

Well, in '99, which we've also looked at this, warehouse demand and GDP used to be very well correlated. That correlation has started to break up in the last couple of years, and it was right at that point of inflection and crossover, as the technology really hit, as big box -- big, big box, ginormous box distribution in major warehouse markets really took off, which is something that has been occurring for the last couple of years up through here and is very, very much likely to continue to occur.

The better supply chain management means you need fewer, larger, better located warehouse markets. And these are the six places -- five or six places in the country -- that are the best for that kind of thing.

So does capital like warehouse? Well, I'm going to torture you one more time with this chart. Capital does very much. We have NOIs that have been falling for about six quarters. We have cap rates that have also been falling but not by much that are over the long-term average. And we have spreads that, again, are incredibly wide.

So the spreads for office, the spreads for retail, and the spread for warehouse are pretty darn wide. For apartment, not so much, but this is -- again, it's a kind of investment that people are paying replacement cost or above replacement cost in a couple of markets, a couple of deals that I've seen for warehouse product, because it's cash, cash, cash. It's an inflation-indexed bond. It's the kind of thing that a lot of capital is looking for today.

So wrapping it all together, I'm going to give you a second to read a couple of these quotes really quickly. And I don't know if any of them sound familiar to you. If they do, you've got a heck of a memory, because this is from the ULI Market Profile Report in 1994. It's very much the same kind of thing that's been -- that people are saying today.

So some things stay the same. That's why we call them cycles. I completely agree that the cycles are going to be muted going forward, but we're still going to have cycles. That's absolutely not going to change, and there's going to be some differences. This cycle was very different from the last cycle, and coming out of this downturn it's going to be very different as well.

We've had an unprecedented demand event that has occurred. We have pricing that has now linked both the fundamentals and the broader capital markets, which for good or bad things is now what's happening. It's different, though, than the last cycle. Not as many defaults as we saw in the last cycle, and they'll go up, but we won't see as many as we did in the last cycle for sure. And the apartment market won't lead us out like it did in the last cycle.

And the next cycle, tomorrow's cycle will be different again. There will be a number of different things that we've got to watch. I hope I sort of have helped clue you in on a couple of the things that we think might be issues, and that's sort of it.

So I'm willing to take a couple of arrows being shot at me at this point, or -- but thanks for your time.

(Applause.)

Yes, a question.

AUDIENCE MEMBER: Yes. The whole idea of what's going on with outsourcing, it's having a major impact it seems on certainly manufacturing, and it has well moved into the whole office employment area. What do you see going forward with that?

MR. WILKERSON: Yes. No, that's a great question. It's something that a lot of people are talking about today, because a lot of people are feeling the pain really for the first time in the office market. It's been occurring in the manufacturing market and the industrial market for years and years and years.

And, in fact, this started occurring quite a while ago. It was part of the reason why we think the economy got as far as it did in the late '90s was that we had turned a lot of those already to places like India. It's part of the reason why the unemployment rate today, at six point whatever percent, doesn't give us a lot of slack in the labor force to grow the economy at an extended period of time, in particular if we don't have the kind of labor force growth which we're not going to have.

So very painful now. Not new news. It's one of the reasons why I think that it's taking us longer to get out of the downturn. It's also one of the things that's going to help us grow the economy more quickly going out in the outer years. That's further out, but it's very painful now, will help us later.

AUDIENCE MEMBER: Bret, I have a question. You're talking about the multi-family being overpriced. And, in contrast, we were hearing earlier how the office market is two-tiered right now. And also, we know that pensions are allocating more money for good commercial real estate properties.

So presumably, they aren't going into the multi-family, which would not be termed a good investment. Why is it that the market is viewing office appropriately but not apartments?

MR. WILKERSON: A lot of the capital is still going into multi-family, which is the problem. There are bidders -- I mean, you see deals of six caps in Dallas. You see, you know, crazy numbers, and it's not -- it's the private guys and it's the pension funds. It's a lot of different people.

Part of the reason for that is because you have automatically a diverse tenant base, and you have occupancy of 90 percent. And these are the kinds of things that people get to be comfortable with. You have a lot of people that are expecting a lot more income growth than we are, because they are looking at things like in some markets concessions on a 12-month lease are three months.

And in most markets, there is the guy in the chicken suit, you know, out there screaming come on in. So people are seeing those concessions burn off and expecting those concessions to burn off. And they've seen over the long run total returns in multi-family -- total returns, including the value -- are much, much less volatile. So that's why a lot of people are still chasing them.

Good. Well, thank you.

MR. BROWN: Thanks. If there are no more questions, thank you very much, Bret.

(Applause.)

I just have one more announcement, one more person to recognize. Tom Murray -- Tom, if you'd stand up over here -- is responsible for putting this whole thing together. And Bravo, Tom.

(Applause.)

I want to thank Bret for a very insightful and entertaining presentation. Even if you didn't have anything to do with the GM deal, we really appreciate that.

(Laughter.)

Thanks to the other panelists, and thanks very much to all the participants for joining us today.

Thank you.

Send comments on this *FYI* to: Thomas Murray tmurray@fdic.gov

Send feedback and technical questions about the *FYI* series to:
fyi@fdic.gov

All media inquiries should be addressed to: David Barr, FDIC Office of Public Affairs, dbarr@fdic.gov

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Slide 1: In diagram form, this slide indicates the players and their different roles in commercial mortgage backed securities (CMBS) origination. The relations are shown by line drawings and show how the borrower's loan request progresses to ultimately become part of a rated security purchased by investors. The source of this slide is Sally Gordon of Moody's Investors Service.

Slide 2: This slide presents the historic losses of CMBS securities and the shares of losses experienced by the different purchasers of the different rated and unrated categories. The cumulative CMBS losses to date are 15 basis points. The source of this slide is Wachovia Securities.

Slide 3: This slide presents the performance trends in terms of total returns, vacancies and loan delinquencies for each of bank real estate delinquencies, life insurance company delinquencies and total NCREIF returns along with average vacancies. For returns and vacancies, the period covered is 1985 through 2003 year-to-date. For life company delinquencies, the trend is from 1989 through year-to-date 2003 for delinquencies. The bank's delinquencies run from 1990 through 2003 year-to-date.

Slide 4: This slide presents cap rate trends for the four different property types of apartment, retail, industrial and office for 1985 through 2003, year-to-date. The source of the data is NREI.

Slide 5: This slide presents risk premiums for 1986 through 2003, year-to-date for the four different sectors of apartment, retail, industrial and office. The sources are NREI and Wachovia Securities.

Slide 6: This slide presents two charts with the message that CMBS investors have less risk for their loans to have refinance or takeout risk because the assumed trend in interest rates will not be economically conducive for borrowers to refinance. As a consequence, the slide states that CMBS bondholders should be reasonably well protected from defaults, and losses associated with refinancing risks. Two charts are shown, one titled Loan Balances with Shortfalls by Vintage and the other titled, Shortfalls by Issue Vintage. Both are sources Wachovia Securities and Intex Solutions. Shortfalls are shown to be highest for loans maturing in 2004 - 2005.

Slide 7: This slide shows actual levels for supply, demand and vacancy for each year from 1990 through 2002 and then projected levels for 2003 and 2004 for the US apartment sector. The source is REIS, Inc. and Wachovia Securities, LLC.

Slide 8: This slide shows actual levels for supply, demand and vacancy for each year from 1990 through 2002 and then projected levels for 2003 and 2004 for the US office sector. The source is REIS, Inc. and Wachovia Securities, LLC.

Slide 9: This slide shows actual levels for supply, demand and vacancy for each year from 1990 through 2002 and then projected levels for 2003 and 2004 for the US retail sector. The source is REIS, Inc. and Wachovia Securities, LLC

Slide 10: This slide presents a table reflecting Wachovia Securities expectations for first quarter 2003 through third quarter 2004 results for various components of the US economy including GDP, unemployment, CPI inflation and financial prices including the Fed Funds rate, 3 month LIBOR and the 10 year treasury note rate.