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1 NEW YORK CITY TEACHERS' RETIREMENT SYSTEM
INVESTMENT MEETING
2 held on Thursday, May 3, 2012
at
3 55 Water Street
New York, New York
4
5

ATTENDEES:

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7 MELVYN AARONSON, Chairperson, Trustee, TRS
SANDRA MARCH, Trustee, TRS
8 MONA ROMAIN, Trustee, TRS
LARRY SCHLOSS, Comptroller's Office, Trustee
9 JANICE EMERY, Trustee, Finance
THADDEUS McTIGUE, Trustee, Comptroller's Office
10 JAMIE SMARR, Trustee, Finance
MARC KATZ, TRS
11 SUSAN STANG, TRS
MARTIN GANTZ, Comptroller's Office
12 JOEL GILLER, Comptroller's Office
MARC GROSS, Comptroller's Office
13 SEEMA HINGORANI, Comptroller's Office
MARK KIM, Comptroller's Office
14 KATHY MARTINO, Comptroller's Office
BARRY MILLER, Comptroller's Office
15 YVONNE NELSON, Comptroller's Office
PETRA NIKOVA, Comptroller's Office
16 PAUL J. RAUCCI, Comptroller's Office
ROBERT C. NORTH, JR., Actuary
17 ROBIN PELISH, Rocaton
CHRIS LYON, Rocaton
18 RENEE PEARCE
ROBERTA UFFORD, Corporation Counsel
19 STEVE BYRNES, Townsend
SARAH CACHAT, Townsend
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P R O C E E D I N G S

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(9:50 a.m.)

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MR. KATZ: Good morning. Welcome to the
investment meeting of the Teachers' Retirement System,
May 3, 2012 meeting. We will begin by calling the roll.

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Melvyn Aaronson?

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CHAIRPERSON AARONSON: Here.

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MR. KATZ: Kathleen Grimm?

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(No response.)

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Not here.

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Sandra March?

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MS. MARCH: Present.

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MR. KATZ: Janice Emery?

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MS. EMERY: Here.

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MR. KATZ: Freida Foster?

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(No response.)

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Not here.

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Mona Romain?

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MS. ROMAIN: Present.

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MR. KATZ: Larry Schloss.

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MR. SCHLOSS: Here.

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MR. KATZ: We have a quorum, so we can

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begin. Chair?

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CHAIRPERSON AARONSON: Thank you very much.

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Welcome, everybody. And today, the first

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item on the agenda will be the report by Larry on the
status of our pension fund.

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MR. SCHLOSS: Thank you, Mel.

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Does everybody have their monthly packet
from March? Good.

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Pretty quickly through the economics, just
because they haven't changed very much. I'd like to say
that we're slowly trending upward in the economy and you
can see that on page 6. Again, while the weekly
unemployment claims bounced around, we can see a trend
that goes very slow, and that's the problem.

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And again, just rolling through here, if you
go to page 10, I'm a little bit worried about the
architectural billing index because that's a precursor
for a year or two's worth of construction, so that's not
good; you'd like to see it going up. It also means,
again, a slow recovery.

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Page 11 shows that housing prices are still
going down. I heard a rumor that it was stabilizing,
but it's just a rumor.

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Again, if you just jump now to page 22. So,
again, the economy is getting better, I'd say with
periodic thunderstorms from Europe, it's probably the
best way to phrase the whole thing. And you can see on
22 that there was a rumble in April, and that's why the

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1 VIX started bouncing around. Rumbles will come out of
 2 the blue, rumbles will be coming out of France depending
 3 on the election. While Europe's trying to figure out
 4 austerity or growth, you can't just flick the switch
 5 either way, so this is going to be complicated and be
 6 with us for a couple of years.

7 With that said, on page 23, as you can see,
 8 the Fed is still busy at work keeping U.S. rates low.
 9 Operation Twist is running out in June, they haven't
 10 said what's next. My guess is they're going to hold
 11 their powder as long as possible and if it continues to
 12 drift, I think they'll stay to the sides, but if they
 13 could continue, we'd like them to do more.

14 You can see on page 24, ten-year Treasuries,
 15 again, during the rumble in April, there's a flight to
 16 safety, the ten-year Treasury has popped up to about
 17 220, they're back down to -- before the rumble, they
 18 were up to 220. Then the rumble came, brought up 2
 19 percent again, now it's about 191 so people are a little
 20 bit worried again.

21 You can see it on page 25 as well, when
 22 things were good, high yield bonds were, high yield, as
 23 well as investment grade is tightening. It's pulled
 24 back a little bit but we expect them to continue to
 25 tighten as the Fed keeps rates as close to zero as

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1 possible.

2 The good news is, on page 27 which is
 3 corporate profits, they keep growing, they might be
 4 contracting a little bit, but overall profits are going
 5 up. Profits go up, they hire more people and then they
 6 kind of roll it forward.

7 You can see the PEs on page 28 of the major
 8 markets. And again, equities are not expensive, which
 9 is why we over-allocated to equity.

10 Jumping to page 30, you can see pretty
 11 graphically from mid-December when the ECB pumped a
 12 trillion plus dollars of three-year loans into the bank
 13 system in Europe, equity markets all went up, U.S.
 14 Equity markets went up more than the other ones, and
 15 EAFE and the euro and the emerging markets pretty much
 16 stalled out as did the U.S. market for the last six
 17 weeks or so.

18 But again, a nice rebound, which we'll get
 19 to in a second, as to how we profited from that.

20 If you go to page 32, you can see that at
 21 the end of March, we had about \$44.6 billion, which is,
 22 I think, an all-time high. And I tell you that I think
 23 in April we're up a little more, so I think we might be
 24 north of \$45 billion, which would be great.

25 You can see how that looks on page 33 on a

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1 ten-year cycle. I'm not sure if we double it in five
2 years -- double in ten years, it's seven, right? So, it
3 looks like about 7 percent for 10 years, despite the
4 dip. And again, in a decade, it kind of went nowhere;
5 that's pretty good, actually.

6 If you jump to page 40 for a second -- and
7 we're going to reorder this -- in the month of March, if
8 you look at the top, numbers on the left, at one month,
9 the equity markets in the U.S. are up about 3 percent,
10 they were down about 3 percent in emerging markets, and
11 the bond market in the U.S. generally pulled back a
12 little bit in March. But because we are as weighted as
13 we are in equities, we had a good month.

14 If you jump to page 36, 36 is the adjusted
15 policy weight for the asset allocation that, as you all
16 know, we're implementing. Things are pretty much where
17 we'd like them to be. Having said that, we've reduced
18 EAFE by about a percent and put that money into emerging
19 markets, as we try to rotate more into emerging markets.

20 We also put another half percent into
21 emerging markets for cash, so its cash number is now
22 approaching zero. We're working on opportunistic fixed
23 income, which I think is the chartreuse way on the right
24 side. They're slowly drawing down capital.

25 The number that I would point you to that we

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1 should talk about, and probably the best way to talk
2 about it is on page 37. It's a high yield number. The
3 high yield numbers in the third block, the numbers right
4 below TIPS, and you could see that we're about 6
5 percent. But because of the parking places that we
6 have, we're supposed to be at 8.9 percent, that's just
7 sort of the way the math works, I would say 8.9
8 percent -- let's call it 9 percent in high yield is
9 probably too much despite all the thought that we put
10 into parking place.

11 So, we're not going to get to the 8.9
12 percent, because getting into that is difficult to get
13 out of, so it'll look like we'll be a little short.

14 Having said that, Martin's going to talk
15 about bank loans, which is something of a proxy for high
16 yield and something of a proxy for other things that
17 we'll talk about as well. But we're not going to shoot
18 to get the 8.9 percent adjusted parking place, it's too
19 much, too much high yield bonds which can become very
20 illiquid when markets go the wrong way.

21 And again, what's pushing it up is the
22 parking place is for -- primarily for opportunistic
23 fixed income, and Martin and Adi are working very hard
24 to finish up some documents, so we just don't think it's
25 the right thing to park there. We don't have ETFs,

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1 which are more minimal, just -- we should talk about
2 some more, which we will talk about in the future a
3 little more.

4 So, if you look at page 41, all those
5 things, particularly, the ECB moving the equity markets
6 up caused the second column from the left, the first
7 quarter to be up about 8 percent, which is pretty good.
8 That's really good considering all the noise that
9 preceded it. And the last month -- March was up about a
10 percent, so the total is about 3-1/2 percent.

11 I think we're up a little, again, in April,
12 so maybe we're getting close to 4 through April, so we
13 had May and June, so we're -- we'll get close to where
14 we're supposed to -- get to it if the markets cooperate,
15 if they don't, well, we'll see what happens. But again,
16 it was equities-driven.

17 During the past quarter, the equity markets
18 might be running out of gas a little here, but we'll
19 see. The rest are all the manager reports, so let me
20 just quickly --

21 Seema, do you have any equities comments?

22 MS. HINGORANI: No.

23 MR. SCHLOSS: Martin, anything on fixed
24 income?

25 MR. GANTZ: We'll be talking about that

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1 later in executive session.

2 MR. SCHLOSS: Barry?

3 MR. MILLER: No.

4 MR. SCHLOSS: Yvonne?

5 MS. NELSON: No.

6 MR. SCHLOSS: So, that ends the month, it
7 was a good month, it was a great quarter. On to the
8 second quarter, the fourth quarter of the fiscal year,
9 second quarter of the calendar year.

10 So, that ends our review of March.

11 We have John Bright here today. John is an
12 expert in risk management. Where's John? Sit here next
13 to me.

14 (Indicating.)

15 MR. BRIGHT: I've actually met this board
16 once before in the fall, very briefly, but to just give
17 you a little background. I was a physicist until my
18 mid-30s, and then went to Wall Street as many physicists
19 have done. And I ran a trading desk for a while. I
20 worked as what they call a quant, where we build
21 mathematical models, but most of my time was spent in
22 risk management.

23 And what the risk manager of the Wall Street
24 firm does is many things, but two that I think overlap
25 with what I'm trying to do here. One of them is kind of

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1 to make sure that we know what we have to close a
 2 business every day, aggregate positions from around the
 3 world, and also try to express the risk in a handful of
 4 numbers for senior management so that they can see if
 5 our risk has changed dramatically from day to day, which
 6 parts of the business are taking risks, which are not,
 7 and so on.

8 And the other, and to my mind, more
 9 important part, the thing that a risk manager does is to
 10 be a professional skeptic within a firm. There are many
 11 people in an investment bank inventing many, many
 12 strategies for making money, and they are very much
 13 concentrated on how much money we might make rather than
 14 how much money we might lose if things go wrong. So,
 15 it's the risk manager's job to be almost exclusively
 16 focused on what could go wrong. So, we try to do that
 17 for the pension funds as well.

18 Now, with the overall funds, the five funds
 19 together, the 120-and-some-odd billion dollars under
 20 management is comparable to the balance sheet of a good
 21 sized bank. But, we do not need a risk management
 22 function of the sort that you would find in an
 23 investment bank where -- my last job -- there were
 24 roughly 150 people reporting through me, and we have a
 25 huge organization and we're churning out reports daily,

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1 and reporting to senior management constantly. But here
 2 it's different because the pace is very different.
 3 Positions change at a very measured pace.

4 So, if I were to come back in a month and
 5 give you a risk report, it would look almost identical
 6 to the one I'm giving today. So, we don't need to
 7 generate reports with the frequency, and there aren't as
 8 many ideas bubbling up to be skeptical of as it would be
 9 at an investment bank.

10 So, the staffing of the risk department here
 11 is me a couple of days a week, and then a very talented
 12 young man, Charles, who is full-time and has produced,
 13 essentially, every number you are seeing in these
 14 reports.

15 So, with that in production, let me turn to
 16 the first page and at the outset say I rather doubt I'm
 17 going to tell you anything about the portfolio you don't
 18 already know. So, my ambition is not to give you some
 19 new way of expressing the risk, we all know the risk, we
 20 have a lot of equity exposure. My ambition is more to
 21 give a framework for discussing the risks if over time
 22 they should become more interesting.

23 We now have a vocabulary for comparing how
 24 they used to be or how they have changed. And in
 25 addition, to start to create a framework within BAM

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1 itself, should we start doing things in a more demanding
2 risk management? Shall we start doing derivatives or
3 using leverage, or other techniques that require
4 constant attention? We're trying to start to build the
5 framework within BAM to make sure that we can control
6 this pace.

7 And throughout, I want to look at two
8 different ways of looking at the risk, both the
9 traditional sort of short-term risk measures. What's
10 the risk of loss in the near term? What's the
11 volatility of our asset value over the short run? But
12 also to look at long-term risk, because we have
13 long-term liabilities that must be funded and we need a
14 fairly high rate of return to fund all those
15 liabilities.

16 There's a risk that is equally important to
17 the risk of short-term loss, and that is the risk over
18 the long-term falling dramatically behind where we hope
19 to be by not getting the return we hoped for. So, I
20 want to accentuate both those with both short-term and
21 long-term risk measures.

22 And finally, throughout the presentation,
23 I'd like to stress what I consider to be the limitations
24 of statistical analysis. Statistics is the vocabulary
25 that we all use to describe risks or volatilities and

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1 deviations and so on and so forth, but this is, you
2 know -- we're not trying to model laws of nature, we're
3 modelling the markets. And so -- they're not normal,
4 there are many things and they change over time. So, we
5 can try to estimate parameters with which to do
6 statistics but they're only estimations. And so, it's
7 important to never get carried away with statistical
8 analysis, so I'll try to keep that in mind throughout
9 the presentation.

10 MS. MARCH: Would you say being manipulated
11 by human beings, that that's another problem?

12 MR. BRIGHT: Yes. But I think it's not even
13 conscious manipulation in many cases. Statistics, and
14 particularly as you introduce more and more high-powered
15 statistical techniques, can dazzle people and can easily
16 mislead -- I'll give you a famous example from my youth.

17 MS. MARCH: Flavor of the month.

18 MR. BRIGHT: But it's even -- and this is --
19 and I'll apologize to any of you who have a background
20 in the social sciences, because this is sort of when
21 social scientists make mistakes, mathematical mistakes
22 in a story, but it's a very good illustration of what
23 can go wrong in statistics.

24 There was, years ago -- for years and years,
25 people have been going to the Arctic and counting, you

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1 know, how many foxes there are, how many Polar bears,
 2 how many this, that and the other thing, and they have a
 3 huge database of these. And the in '70s -- and we're
 4 always looking for patterns -- and in the '70s someone
 5 found an extraordinary compelling pattern which had a
 6 huge statistical significance.

7 And the pattern was, if you looked -- no
 8 matter what the species -- if you looked when the
 9 population peaked to when it next peaked, it was always
 10 about three and a half years, and this was true for
 11 every species out there. Dozens of papers were
 12 generated, people finding what the true cause of this
 13 was, was it cosmic radiation, sun spots, God knows.

14 Finally, they turn to a mathematician, he
 15 said, well, if you just have a random thing, it's got a
 16 50 percent chance of going up, 50 percent chance of
 17 going down, so it's got 25 percent chance of going up
 18 and then down; that's a peak. So, if it's got a 25
 19 percent chance of being a peak, they happens every four
 20 years. That's all it was.

21 That sort of things happens all the time.
 22 It's very, very difficult to design an experiment that
 23 you haven't actually put the answer into the original
 24 design and you then discovered you've got some huge
 25 statistical significance because you have discovered

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1 nothing.

2 (Laughter.)

3 So, that's the caution that you always have
 4 to have.

5 So, for the risk measures to say what we are
 6 going to look at. First of all, just market value, how
 7 much do we have equities, the thing is how much fixed
 8 income in traditional pie charts. And then the pie
 9 chart's modified somewhat to include not what is called
 10 equity, but what has behaved in the recent past an awful
 11 lot like equity, which is more than just equity itself.

12 Then we'll look at value at risk. Value at
 13 risk has gotten a bad name. But value at risk is
 14 actually a useful tool for aggregating the volatilities
 15 of different asset classes and rolling them up into an
 16 overall short term volatility of your portfolio. It's
 17 gotten a bad name because it was used as the measure of
 18 the amount of capital that a bank needs to require; and
 19 it has absolutely nothing to do about how we went around
 20 about losing tons of money in investment banks.

21 So, it was completely the wrong thing to use
 22 as a measure of capital. So, it can be useful in this
 23 context.

24 And then I want too look the long term risk
 25 by looking at some stress scenarios, both the 10-year

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1 stress and 40-year stress.

2 So, if we turn to the pie charts. You will
3 see that the Teacher's portfolio has about 3/5 in equity
4 and 1/4 in fixed income, and dribs drabs in other
5 stocks. When we adjust it for what is not only called
6 equity, but what behaves an awful lot like equity, is
7 just to behave and see obvious suspects. It's high
8 yield and convertible bonds on the next page.

9 We see that the equity slice grows to 70
10 percent and fixed income has dropped to a sixth and then
11 a quarter. And many of us would be tempted to put
12 private equity in the equity bucket as well. In the
13 long term you suspect, although management of the
14 company may be better in private equity than in public
15 equity, you would expect that to track to a considerable
16 extent the public equity markets but in the short run it
17 does not track partly because the partnerships and their
18 lags in the reporting of P&L. There is no correlation
19 in the public equities markets in the short run.

20 So, now, I'll turn to value at risk. We do
21 historical simulation of what our P&L would have been
22 month by month, what in the past three years happened to
23 the current portfolio, and then extract from that
24 statistics on the likelihood of various losses.

25 CHAIRPERSON AARONSON: A third pie graph

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1 would be in order, showing what our asset allocation
2 formula is.

3 MR. BRIGHT: Going forward to do the same
4 sort of analysis, but not to what we have but what we
5 hope to have. Yes, of course.

6 CHAIRPERSON AARONSON: Thank you.

7 MR. BRIGHT: Then on page 7 we have results
8 of value at risk, and this was going to be a pie chart.
9 But as you can see we had to make a bar chart, the
10 contributions of equities to the total value of risk is
11 bigger than the total. So, and do a pie chart, one
12 slice is bigger than the pie. And you can see it's
13 about two and a third billion, the value.

14 What dollars means is we're doing it at 95
15 percent. So, it's one 10 to 20. So, it's one month
16 every two years. It's a normal fluctuation in the
17 market. We should expect that the AUM would go down by
18 two and third billion, maybe two and a half, maybe two.
19 But that's roughly the numbers to look at.

20 And the equity contribution as \$2.4 billion,
21 so it's actually bigger. Most of the other things
22 hardly contributed at all, because it didn't correlate
23 very well with equities. And the reason the total was
24 smaller than the contribution of the equity and
25 equity-like, including high yield and convertible bonds

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1 and with equity here, was the flight to quality trades.
2 So, that typically when equity markets went down, fixed
3 income rallied and that little bit of joy that we got
4 out from fixed income brings the overall risk down.
5 A couple of things I should point out. One,
6 how good are the statistics? Not really good. We have
7 got 36 months to look at. So, if I would to come here
8 six months from now and the value at risk went from 2.3
9 to 2.5 or went from 2.3 to 2.1 or if we looked at our
10 allocation it changed by the amounts of -- it's opposed
11 to what we actually have, that's not meaningful, that
12 could easily be -- we should look at it more closely and
13 see if there's a fundamental reason for the risk number
14 changing. But moderate changes of that size, they are
15 all consistent with each other, the numbers, is the best
16 you can say.
17 The other thing I'd like to point out is
18 it's tempting, looking at this sort of statistics and
19 correlations that happened in the recent past, to
20 extrapolate them forward and so to say, we should have a
21 substantial fixed income portfolio because it's a hedge,
22 it brought the overall risk down.
23 So you not only have to look at the
24 statistics, you have to layer on it, some judgment and
25 knowledge of where we are in markets and interest rates

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1 are already zero. They don't have a whole lot of room
2 to go down and give us another rally.
3 And then on the next page we have -- having
4 done it in-house ourselves, we can now -- we're fully
5 aware of what goes into various people's value risk
6 models. Everyone is different. Everyone uses slightly
7 different techniques, different ways of cutting the
8 data. So, it's important to do it yourself to
9 understand all of the assumptions.
10 And the Bank of New York has a vendor that
11 sits on top of the custodial system and prepares value
12 at risks -- and they give it to us. So, having done it
13 ourselves and checked it, we can now use their reports
14 as an example. We may cut over to using them on a
15 production basis. We are not staffed to do constant
16 production. And can drill them to the manager level and
17 the value at risk manager by manager see if anybody
18 looks out of whack; and then try to understand why what
19 manager is unique or different, but nothing jumps off
20 the page.
21 And then on the next page, page 9, we're
22 going to some ten-year scenarios. As I said, the risk
23 guy's job is to worry about loss. So, I picked bad
24 scenarios and only bad scenarios to try to not buy it,
25 the analysis, rather than going from peak to trough type

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1 of scenarios, I've just done full decades. So, you can
2 actually pick worse scenarios by going from peak to
3 troughs, but we try to remove my natural negativity by
4 looking at discreet decades.

5 And the ones we have looked at are what
6 happened in Japan. Suppose the whole world turns into
7 Japan after their property bubble burst? And when
8 interest rates there have been zero for almost my entire
9 living memory, and their equity markets have done
10 nothing, essentially.

11 The other is the U.S. during the years of
12 stagflation, where we found a bit of the equity markets
13 did not perform very well. The other is the entire
14 world looks like the U.S. and the most recent decade to
15 be honest, which was dreadful. And compared to the
16 actuarial scenario of everything growing at 8 percent.

17 And finally, now we have private equity and
18 we have real estate moving synchronizing with the equity
19 markets, being over the long term they will closely
20 track. And fixed income just comes along for the ride,
21 it doesn't matter.

22 MR. GANTZ: You just said I don't matter.

23 (Laughter.)

24 MR. BRIGHT: I think three times in this
25 presentation.

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1 (Laughter.)

2 MS. MARCH: The whole thing doesn't matter.
3 That's just a joke.

4 MR. BRIGHT: So, on page 10, we have the
5 scenarios. The nice blue line going for our current \$45
6 billion up to an excess of \$90 billion is the actuarial
7 assumption of what assets would do over ten years.

8 MS. MARCH: Meaning perfect world.

9 MR. BRIGHT: Yes, it is. More perfect would
10 be 10 percent.

11 (Laughter.)

12 The green line is the U.S. in the 70s, where
13 we have a substantial shortfall. If we look -- the
14 aughts were not anomaly, but what the world holds for
15 us, what do we got, less than half of what we would
16 project in ten years. And similarly, if Japan scenario
17 were to play out. So, it's bad.

18 MS. MARCH: If we didn't have all the thieves
19 and crooks, what would have happened in the aughts? If
20 we just wouldn't involve the law without the
21 corporations falling apart and add all the manipulations
22 from the banking.

23 MR. BRIGHT: Yes. My guess, it's only a
24 guess, is without all the things we dislike, we wouldn't
25 have had the bubble inflate and burst. So, you would

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1 lose the part of the aughts that you would like as well
2 as the part that you dislike.

3 MS. MARCH: That's okay. It's much better
4 if I would have earned just what I was supposed to earn
5 and wouldn't have needed all that extra money and maybe
6 the whole world would not be attacking us.

7 MR. BRIGHT: But I think -- after the
8 technical bubble, we reinflated very low rates. So, we
9 weren't able to earn an 8 percent that we would have
10 liked. Rates were very, very low. It is very
11 difficult. In a low interest rate environment to hit
12 the -- and that was true throughout the aughts.
13 Rates -- people were suffering. There was enormous
14 demand for leverage product so that people could hit
15 their yield bogies.

16 CHAIRPERSON AARONSON: I want to direct to
17 Jamie Smarr. And then the second thing, I just came to
18 a eureka idea. Take is the whole portfolio and invest
19 into the QP fixed fund of getting a quarter percent.

20 (Laughter.)

21 MS. MARCH: That was some eureka idea.

22 MS. ROMAIN: More like a hallucination.

23 MR. SMARR: Get people in the state
24 legislature to know.

25 MR. BRIGHT: So, this is a bad ten-year

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1 scenario. Now, the next page is a 40-year and it's an
2 effort to put some probability around the likelihood of
3 bad scenarios and good scenarios. It's a toy model but
4 it's at least some level of how good or bad could things
5 be. In the past four decades in real terms, which were
6 made of two terrible decades, the 70s and the aughts.
7 In real terms, returns were negative; and two
8 spectacular decades, the 80s and the 90s.

9 So, if we say the next 40 years we label
10 billiard balls, one on the 70s and one on the 80s, and
11 you put out the billiard ball, look at it, that's your
12 next decade. You put it back and then at the end of ten
13 years you pull out another. So, very simple
14 distribution.

15 Well, the actuarial assumption over 40 years
16 is \$1 grows to \$21.70. If we randomly choose decades in
17 this matter, the median is almost the same, because the
18 median is made up of two good decades and two bad ones.
19 But if we get three bad decades either random chance or
20 if that's the state of the world or the wonderful years
21 in the 70s or 80s are over, then the bottom quartile.

22 So, we have 25 percent chance that just
23 happens and this toy model is the way the world works.
24 Again, we we're having \$5 rather than the \$21, less than
25 a quarter of what we projected to meet, which is

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1 ruinous.
 2 MR. SCHLOSS: But --
 3 MR. BRIGHT: If we're so lucky to get three
 4 of the good decades and only one bad one, then we're all
 5 in heaven.
 6 MR. SCHLOSS: You want to sing.
 7 MR. BRIGHT: But, I'm not an economist by
 8 training.
 9 MS. MARCH: I don't know if they know that
 10 even by training.
 11 MR. BRIGHT: But to the extent one thinks
 12 that the growth years were in part fueled by the
 13 demographic bulge of the baby boom, and in their
 14 productivity in the 80s and 90s, that's over now.
 15 MS. MARCH: They have to die fast. They
 16 live too long.
 17 (Laughter.)
 18 There was a report that I heard this morning
 19 on the radio. If we don't level the playing field we
 20 will have four bad decades. It was reported this
 21 morning that the workers of the United States over the
 22 course of time, recent time, have seen a 7 percent
 23 increase in their earnings. Now, top corporate
 24 management in this countries have seen an increase in
 25 their earnings. I wasn't sure if it was over 600

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1 percent or 700 percent. Something is wrong, because you
 2 can only buy so many objects that are \$35,000.
 3 MS. ROMAIN: "The Scream" went for \$119
 4 million.
 5 MS. MARCH: Unless you give some of the
 6 money back to the people who actually go into the stores
 7 that the corporations are producing for, never going to
 8 have any decades of earnings.
 9 MR. BRIGHT: Henry Ford's solution of
 10 raising everyone on production line, so they could
 11 afford his cars.
 12 MS. MARCH: Yes. The measures have to be
 13 given and I don't know how to get it. But I really in
 14 my naive heart of hearts believe, if we don't level the
 15 playing field, it really doesn't matter what we sit here
 16 and do.
 17 MR. BRIGHT: I don't know how one levels the
 18 playing field, but if we don't get it --
 19 MS. MARCH: I do, I'll tell you after the
 20 meeting. We appreciate the bad news.
 21 MR. BRIGHT: I don't have any good news.
 22 MS. MARCH: We will go out in our other
 23 livings and fight for the good news.
 24 CHAIRPERSON AARONSON: Have you concluded?
 25 MR. BRIGHT: No.

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1 (Laughter.)

2 The conclusions are we can't hide the fixed
3 income, we can't take risks out of the portfolio. We
4 need to take risks to get this bogie going of 8 percent.
5 And the way we've taken that risk has been almost a huge
6 dependence on equities, in different public equity
7 markets. And if we don't get growth decades, if we get
8 bad decades, we're not going to get there.

9 So, my conclusion is that we have to start
10 looking at some things that we might have shied away
11 from because they're scary, derivatives, leverage;
12 because what we are doing now is scary, the dependence
13 on equity. And maybe I should quit before this slide.

14 MR. SMARR: You can put it out there,
15 though. And we can make retirement benefits less
16 general, maybe we would not need 8 percent.

17 MS. MARCH: An the 7 percent increase in
18 their earnings which is the bulk of it, they would get
19 even less, and those individuals will get the 600 to 700
20 percent increase in their earnings they should continue.

21 MR. SMARR: I don't want to comment on that.

22 CHAIRPERSON AARONSON: You know what is a
23 scarier figure that I heard? That currently, the
24 average CEO in America earns 217 times the amount of
25 money the average employee in that corporation earns.

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1 It used to be 17 times that -- it's just scary.

2 MS. MARCH: Yes.

3 MR. BRIGHT: It does fluctuate enormously.
4 CEOs get paid in stock options. So, in the year in
5 which exercise the options, it could be 217 times.

6 CHAIRPERSON AARONSON: That's the average
7 from what I have read.

8 MR. BRIGHT: But it can easily happen that
9 way.

10 CHAIRPERSON AARONSON: So, Robin, do you
11 have any comments on this?

12 MS. PELISH: It will all be okay.

13 (Laughter.)

14 I think this is great. I think this is the
15 kind of discussion that the board should focus on more
16 frequently than it had the opportunity to focus on
17 previously. But I think it might be worthwhile to, over
18 the next few meetings, have some time focused on this.
19 Because this analysis is very interesting, but one of
20 the problems with the kind of risk analysis is that you
21 often can't wait for the decade to play out because you
22 have you to live in the short term.

23 MR. BRIGHT: And also, sometimes it's a weak
24 signal that you're falling behind, but the time to act
25 is when the signal is weak, when it's obvious it's too

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1 late.
2 MS. PELISH: Right. So, you can't wait for
3 the next billiard ball to be selected because you have
4 to fund in the shorter term. So, that's one reason why
5 paying a lot of attention to this topic is important.
6 And the other point I'd like to make is, you
7 actually can de-risk portfolio which doesn't --
8 MR. BRIGHT: You need a lot of money.
9 MS. PELISH: -- which doesn't automatically
10 mean putting a lot of money into bonds. There are other
11 ways of de-risking that are a little bit more creative.
12 MR. BRIGHT: I would not say de-risking. I
13 would say they are getting rid of the risk that we
14 notice and want to be rid of, and substituting another
15 risk we haven't thought of.
16 MS. PELISH: Yes. We only get paid for
17 risk.
18 MR. BRIGHT: Yes.
19 MS. PELISH: But we can reduce some of the
20 reliance on -- we should at least consider reduction of
21 the reliance on equities.
22 MR. BRIGHT: Yes. But we need to get paid,
23 meaning, be careful enough and you have to figure out if
24 your risk --
25 MS. PELISH: Absolutely. So, all of that

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1 goes beyond what you had time to present today and so I
2 think this is -- my only point is this is very
3 interesting start the topic, but simply reporting the
4 bars is just a start.
5 MR. BRIGHT: Throughout my career, I would
6 make such gloom and doom presentations. People would
7 ask me, well, what do we have to do? What fix is it?
8 Not my job. I'm the risk guy.
9 MS. PELISH: It's a limited scope.
10 (Laughter.)
11 CHAIRPERSON AARONSON: What about taking one
12 of these GSAA weekends in Hawaii.
13 MS. PELISH: I'm in favor.
14 (Laughter.)
15 MS. ROMAIN: What would you say would be the
16 follow-up to this start?
17 MS. PELISH: I think the follow-up is
18 precisely what was referred to. So, here is the number,
19 are there any ways to manage this number to potentially
20 be lower without completely sacrificing the needed
21 returns, so --
22 MR. BRIGHT: And I think it's important
23 going down like that path, almost invariably they will
24 involve leverage is some way.
25 MS. PELISH: Yes.

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1 MR. BRIGHT: So everyone has to get
2 comfortable with the conception of leverage.

3 MS. PELISH: And it's a discussion. It's a
4 discussion where we say, These are the facts, this is a
5 way we could structure things somewhat differently to
6 arrive at a different set of facts, and that may or may
7 not -- it's a very strong probability that the board
8 after discussing those alternatives says, We're more
9 comfortable with the reliance on public equity. We
10 think those risks are more transparent, more clearly
11 understood and that's where we want to continue taking
12 it.

13 But we should at least spend time looking at
14 alternative ways of incurring risk in the portfolio.

15 MR. BRIGHT: And I've just got to add one
16 thing. If we go down the path incurring these other
17 risks like leverage, we would need a much more robust
18 infrastructure within BAM. I would not be comfortable
19 with me and Charles being able to --

20 MS. PELISH: To implement, absolutely. If
21 you're implementing leverage.

22 MR. BRIGHT: Yes.

23 MS. PELISH: You need a lot of people, more
24 ways around that.

25 MR. BRIGHT: Yes.

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1 CHAIRPERSON AARONSON: So, I think that
2 one of the things that's come out of this discussion is
3 Larry is going to plan in the future that we have more
4 discussions in this area.

5 MR. SCHLOSS: Right.

6 CHAIRPERSON AARONSON: And thank you very
7 much, John. That's a very thoughtful report.

8 MR. BRIGHT: Thank you very much.

9 MR. SCHLOSS: Martin, next.

10 MR. GANTZ: Next is on bank loans. I'm
11 handing out copies that have an extra page and slight
12 revisions; this way we're referring to the same pages.

13 (Indicating.)

14 I prefer that you refer to the colored
15 handout that I just gave out. It does have a couple of
16 extra sheets and an extra page.

17 Bank loans are financial instruments
18 representing a senior claim on corporate assets.

19 Any questions? We're done.

20 So, you may recall that back in 2008 during
21 the depths of the financial crisis, I believe it was
22 November of 2008, when bank loans were priced at
23 historically low levels, and levels the industry never
24 seen before, we brought the board the opportunity to
25 invest in bank loans using a high-yield managers that

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1 had expertise, and the board approved, and in January of
2 2009 implemented that. In fact, the managers did invest
3 in bank loans. As the prices came up -- and I will show
4 the charts in a few minutes -- the prices now have come
5 back to where the managers generally are not investing
6 in the bank loans.

7 But we do have this presentation. It's
8 really a refresher on what we had discussed before and
9 it's also going to lead into what we're going to discuss
10 next month, which is our bank loan and search process.
11 Remember, last month, we did high yield, next month
12 would be bank loans.

13 So, the first couple of pages really
14 describe about bank loans. But before we get into that,
15 I want to talk about, look at the main price, you are
16 going to hear or you may read about these instruments
17 and they're called different things. We're calling them
18 bank loans, you may read or hear about something called
19 leveraged loans. I'm referring to leveraged loans as
20 well. They refer to syndicated loans. They're referred
21 to sometimes as simply loans. They are all referring
22 effectively the same thing.

23 We are here to talk as using the word "bank
24 loans." But in case you come across documents and
25 leveraged loans, that's what they were referring to.

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1 If you take a look at a picture on page 3 --
2 and we actually thank Rocat on for this -- it shows the
3 capital stack of where investments or where equity and
4 debt sits and claim on the assets. And bank loans as
5 you see sits at the top of the capital structure.

6 So, they are not what we refer to as fulcrum
7 security generally, which is security that will let
8 someone take control of a company in distress or
9 structuring. Sometimes it can be, depending on the
10 capital structure. But in essence, in restructuring --
11 and we'll get to that in a moment -- you do receive a
12 very high level of your principal back because you are
13 first in line.

14 Bank loans are generally made to high-yield
15 companies, that is, companies with below investment
16 grade ratings. And many times they are made to finance
17 LBOs, they are leverage buyouts, or the companies that
18 are in our private equity firms are working on, much
19 like the high-yield bonds in euros. The banks sometimes
20 hold on to the loans, but for the most part, they didn't
21 package them as they sell them to investors so they are
22 not on the books of banks.

23 Hence the name, bank loans. Effectively
24 they are really loans made by banks to corporations that
25 are very senior in the capital structure. These days,

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1 high-yield managers, as we described in 2008 and
 2 certainly evolved further. These are high-yield
 3 managers, they also invest in bank loans and some have
 4 completely separate bank loan departments; and that's
 5 important because, especially bank loan departments,
 6 especially operationally is important because these are
 7 typically not securities as we know them. And that's
 8 why they go to the basket.
 9 They are really stacks of documents, and the
 10 LSTA, which is a trade group for bank loans, they are
 11 working to get over time the settlement period of the
 12 issues worked on. And I can tell you in the period of
 13 time since we started with bank loans, it's gotten a lot
 14 better; but they do not settle three days like regular
 15 securities, because they are, in fact, not regular
 16 securities.

17 I mentioned they are in the basket, that is
 18 a bit of a head scratcher. I mentioned they're at the
 19 top of the capital structure --

20 MR. SCHLOSS: Basket is the head scratcher.

21 MR. GANTZ: Yes, in part, the basket is the
 22 head scratcher. But this pieces of baskets are head
 23 scratcher simply because high yield bonds are permitted.
 24 And we will go to the recovery rates and the default
 25 rates later; but high-yield bonds are permitted to have

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1 a lower -- they're lower in the capital structure. They
 2 have a lower recovery rate if there is a default.

3 Bank loans, which are technically safer
 4 because they have a higher recovery rate are not
 5 permitted, and they are not permitted because they are
 6 not registered generally with the SEC because they are
 7 not securities. They are effectively treated as private
 8 placements in the law, which generally are not
 9 permitted.

10 So, that is a bit of head scratcher. It's
 11 safer than high-yield bonds, but they are not permitted
 12 by the law, so they go in the basket.

13 Back to the chart on page 3, so you see the
 14 bank loans are the top of the capital structure. They
 15 come in a variety of maturities and interest rates but a
 16 really important difference and differentiation between
 17 what bank loans are and high loans, if you turn to the
 18 next page.

19 MR. SCHLOSS: Can I stay on this page one
 20 second? So, if you look at this table, this little
 21 chart, make believe this is a capital structure of a
 22 private equity deal, or just a non-investment grade
 23 company. So, 5 percent of our portfolio is in the
 24 bottom, in private equity; 6 percent of our portfolio is
 25 in bonds, the high-yield bonds; but zero of our

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1 portfolio is in the top. It's just sort of missing from
2 our capital allocation, and as Martin is going to
3 explain less risk, et cetera, et cetera, it's sort of
4 odd -- again, when we look at asset allocation, things
5 that we have in our portfolio.

6 MR. GANTZ: And really, one of the functions
7 of the law.

8 MR. SCHLOSS: That's missing, and it
9 shouldn't be missing. But the purpose of this whole
10 exercise.

11 MR. GANTZ: Right. If you turn to page 4,
12 this is chart to some of the differences between bank
13 loans and high-yield bonds. Bank loans come in a
14 variety of maturities, interest rates, but they are
15 generally the most senior, secured instruments in a
16 capital structure, but really a very important
17 characteristic. If you take a look at the very top
18 line, the Interest Rate Coupon, you see that bank loans
19 generally -- not always, but generally -- are floating
20 rate and high-yield bonds are fixed rate.

21 So, high-yield bonds would be a 5-year bond
22 or 10-year bond, it's priced often Treasuries to 5 years
23 or 10 years Treasury. But when interest rates rise,
24 because of duration, you will lose money. For instance,
25 Core+5, let's say has a five-year duration, interest

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1 rates magically raise, went up by 1 percent
2 instantaneously, you would lose 5 percent. You would
3 lose 5 percent from that 1 percent rise in interest
4 rates, because bank loans have a floating rate of
5 interest, and that interest rate generally -- not
6 always, every bank loan is different, but generally gets
7 reset very frequently, sometimes monthly, sometimes
8 quarterly. The duration of it is effectively zero.

9 So, not only don't you have a negative
10 effect from interest rates going up, but you actually
11 benefit because the interest rate is resetting at a
12 higher rate. So, you're collecting a higher rate, so
13 it's a very nice complement because of the zero
14 duration. So, we would refer to this as having pure
15 credit risk because you're eliminating the duration of
16 risk.

17 And there are several majors risks in bonds;
18 you have credit risk, you have interest rate risk
19 measured by duration, you have spread risks, the risk
20 that investors will avoid or seek risky assets versus
21 Treasuries.

22 The priority, as shown in the chart on the
23 prior page, and on this page, on bank loans is senior.
24 So, you get paid out first. High-yield bonds are
25 generally subordinate. It's subordinate to bank loans,

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1 but sometimes senior because there are some banks --
2 there are some high-yield bonds that are issued by
3 companies that don't have bank loans. So, those cases,
4 high-yield bonds themselves are the most senior in the
5 capital structure. But generally, the bank loans are
6 most senior.

7 Also, this is important, the amortization,
8 bank loans do have principal payments that the bank loan
9 gets paid down over time; whereas the high-yield bonds
10 like Treasury, it's a five or ten-year bond typically.
11 You get paid interest every six months and after gets
12 refinanced, paid off, this will get refinanced before it
13 gets called.

14 And the next line shows you that it is call
15 protected, meaning you get a bit of a premium if it does
16 get called, whereas the bank loans are pre-payable
17 without that penalty.

18 But the real key here is the floating rate
19 versus the fixed rate and the seniority of the
20 securities in case something goes wrong. So, let's talk
21 about what happens when things go wrong.

22 Next page, on page 5, shows historical
23 default rates. Since I mentioned that these are
24 generally the same ratio of below investment grade
25 that's in the high-yield universe, that closely double

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1 Bs and single Bs. There are few triple Cs and there are
2 few triple Bs. So, they do default, but the default
3 less than the high-yield bonds, which are shown in blue.

4 But if you turn to the next page which is
5 very important, page 6 --

6 CHAIRPERSON AARONSON: Excuse me, Martin.
7 We had these loans in our portfolio since when?

8 MR. GANTZ: January of 2009.

9 CHAIRPERSON AARONSON: So, then, there was a
10 peak of defaults of 8 percent.

11 MR. GANTZ: Right. To my knowledge no,
12 because they are buying and performing well. They are
13 buying loans that are not the distressed loans. Those
14 would be -- as you saw the manager last month, the
15 distressed buyers would buy those.

16 CHAIRPERSON AARONSON: Thank you.

17 MR. GANTZ: On page 6, it is not whether the
18 company defaults, because if you have a senior claim on
19 assets, it's very possible you're going to get 100 cents
20 on the dollar. And sure enough, as you see, with the
21 exception of obviously what happened recently in the
22 financial downturn in 2008, bank loans had a 70 to 90
23 percent -- 7 to 9 cents on the dollar recovery rate
24 because of the senior claim on assets.

25 It also depends on the industry. It depends

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1 on the issue. It depends on the issuer and the assets.
 2 But the high-yield bonds are all over the place and
 3 generally have averaged about 20 to 40 cents on the
 4 dollar as a recovery rate, and it could be zero,
 5 depending where you are in the capital stack and what is
 6 left.

7 The next page, on page 7, it shows who owns
 8 the bank loans. And the story here is the blue bar,
 9 which refers to the CLO. CLOs are structured vehicles
 10 that refer to Collateralized Loan Obligations. And
 11 really what they are is a financial structure that uses
 12 leverage, that borrows money to buy bank loans, and then
 13 tranches them out and sells them to investors with
 14 different risk profile.

15 So, I want to turn a few pages, turn to page
 16 12.

17 This is a 20-year price chart of bank loans.
 18 So, obviously you see that, a very steep decline in 2008
 19 which it has recovered from. So, barring that until
 20 that time, with the exception of a very brief period,
 21 bank loans have never as a group have been priced below
 22 90; for the simple reason that they are senior claim on
 23 assets and you're expected return at that point was
 24 about 90 cents on the dollar.

25 2008 was when the market melted down and

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1 fortunately the market has come back. High-yield market
 2 also has come back. But the important part of the chart
 3 is the blue line which is high yield, and high yield is
 4 very sensitive to the business cycle. So, you will have
 5 very, very volatile swings in pricing because of the
 6 sensitivity to the business cycle, and therefore you'll
 7 have volatility as well as lower recovery rates.

8 Bank loans are left since the business
 9 cycle, though some sensitivity. They're less sensitive
 10 because they violate a covenant or they go in default,
 11 they're are first on line, after government and taxes of
 12 course.

13 And so going back to page 7, who owns and
 14 who owned bank loans. It is mostly collateralized loan
 15 obligations, because prices were very steady versus the
 16 entire history of bank loans. They were the ideal
 17 instruments to leverage because it didn't move much in
 18 price. So, you can put leverage on top of it and not
 19 worry that you have the margin call.

20 Well, that changed in 2008. Investors,
 21 first of all, are harder to get leverage. Secondly,
 22 investors are trying away from it. So, slowly but
 23 surely, the CLO is becoming a smaller part of the
 24 high-yield universe' whereas the bottom part, which are
 25 orange, which is high-yield bonds, some distressed funds

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1 and of course, bank loan themselves, are taking
 2 institutional dollars and unleveraged leverage loans,
 3 simply buying long only leveraged loans of the bank
 4 loans that we are referring to now.

5 So, it's becoming more institutionalized --
 6 I'm saying that word in a positive sense -- and it's
 7 becoming more of a mainstream product. And to give you
 8 a sense of the size of the market, the size of the
 9 market is approximately the same as the high-yield
 10 market. It's about a trillion dollars, give or take.
 11 It was higher a few years ago, but as long rates have
 12 fallen, a lot of issuers that have banks loans took an
 13 opportunity to refinance and issue high-yield debt
 14 because they locked in very low, long-term financing.

15 So, the bank loan market went down, still
 16 very large, but it went down. And by the way, this is
 17 what the Fed was hoping would happen, and in this case
 18 it did happen for the high-yield bank loan market.

19 So, it's still a very robust large market
 20 but just not at large. So, we're talking about maybe \$1
 21 billion versus \$1.6 billion, as we speak.

22 CHAIRPERSON AARONSON: Martin, out of the 40
 23 percent, how much of that is hedge funds?

24 MR. GANTZ: Good question. I have to get
 25 back to you on that. I will tell you though the hedge

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1 funds, it's fast money, so it would go in and out of
 2 bank loans.

3 CHAIRPERSON AARONSON: That's what scares
 4 me.

5 MR. GANTZ: It's probably not a steady
 6 dedicated amount, probably.

7 MS. HINGORANI: There are certain funds that
 8 dominantly own bank loans.

9 MR. GANTZ: We can certainly get that
 10 number.

11 CHAIRPERSON AARONSON: That's the part that
 12 scares me, the hedge funds.

13 MR. GANTZ: In 2008, the hedge funds had to
 14 get out because they were using it to lever up outside
 15 of the CLOs. And so we're becoming more of a
 16 traditional institutional investors being marketed to
 17 pension funds like yourselves that are unlevered, just
 18 like high-yield bonds.

19 No, it's not too much. I just said that no
 20 duration, lower risk, what's not to like? So, turn to
 21 page 8.

22 (Indicating.)

23 And you will see we compare high-yield bonds
 24 versus bank loans that are measured by Merrill Lynch
 25 index for extra high-yield.

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1 MR. SCHLOSS: Hold on. Let me just think
2 about your hedge fund question which you were trying to
3 ask, really. You were asking, if I can parse through
4 it, you're worried about the volatility caused by the
5 hedge funds. So, in that scenario, we all want to get
6 out, that means the market's got a problem.
7 So, the market has a problem, your
8 opportunity is to make fixed income guys to be the
9 buyers of that stuff where you make money in theory, and
10 the money managers that were the bank debt owners, the
11 value would go down. But since these are senior, and to
12 look at Martin's charts, they don't default as regularly
13 as the high-yield bonds, so over time, as a long-term
14 investor, you go back up.
15 So, you would ride this down and up, we
16 wouldn't sell. This is a mark to market but since they
17 are senior, you're not in a bad place in the capital
18 structure. If it was really bad the opportunistic guy,
19 are making money down here, and ultimately you will get
20 your money back.
21 The theory of what happens if you get a big
22 rush in and rush out and the stock market kind of goes
23 like this too during that period. But this should have
24 the least amount of volatility and ultimately you get
25 your money back unless the economy completely craps out.

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1 MR. GANTZ: As part of the chart that you
2 saw on page 12 --
3 MR. SCHLOSS: It's a good place to be.
4 Just thinking about conceptually from a risk return.
5 MR. GANTZ: And part of the chart that we'll
6 go through again that was on page 12. The price chart,
7 the reason the price dropped dramatically, and we
8 brought it to you in November of 2008, was because
9 investors like hedge funds were facing redemptions that
10 are required to sell, and investors such as pension
11 funds were able to buy those at good prices unlevered;
12 whereas the hedge funds had borrowed money to buy that,
13 to increase returns.
14 MR. SCHLOSS: That is the key; ours will be
15 unlevered.
16 MR. GANTZ: Right. So, as I mentioned,
17 there no free lunch here. You see from the chart here
18 that high-yield bonds, as you might imagine, because
19 there's more risk, have a higher return; in fact they
20 have achieved the higher return. They also have a
21 higher risk as measured by steady deviation.
22 Now, the steady deviation under the Credit
23 Suisse loan index -- there is two major indexes here,
24 Credit Suisse (unclear) and then there's one sponsored
25 by S&P and the LSTA, which I mentioned is the trade

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1 group for bank loans. The standard deviations look a
 2 little bit high, but it's very skewed by that 2008
 3 period. If you X out that period, the 20 years, it
 4 would be in the low single digits, the volatility. And
 5 that's where we are right now in bank loans.
 6 The next few pages show you where the bank
 7 loans, how they did -- we've ran this on Bloomberg. So,
 8 it shows you in white what bank loans did, it shows you
 9 in green what high yield did and shows in red what
 10 equities did. And it takes you 15 years to get to what
 11 capital market theory would say, which is that bank
 12 loans should have a lower return overall than high yield
 13 and equities, even 15 years equity as measured by the
 14 Russell 3000 returned 6.08 percent -- on page 11 -- and
 15 bank loans returned 5.15 for high yield returned 7.07.
 16 So, even 15 years, high yield does better than equities.
 17 So, we showed you on page 12, the price
 18 chart with the exception of that period where a lot of
 19 distressed investors or hedge funds were forced sellers
 20 in the markets. I don't want to pick on hedge funds,
 21 leveraged investors were forced sellers in the markets.
 22 The prices generally --

23 MS. HINGORANI: Thanks, Martin.

24 MR. GANTZ: The prices generally move from
 25 90 to 100; in fact for most of the time, it's in their

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1 park, right on top of the par level. We have a few
 2 other charts to show you what the spreads are and what
 3 the yields are. On page 13 shows what the spreads are,
 4 and red would be high yield, and you would expect
 5 spreads are a little higher right now. Spreads are
 6 roughly the same, apples and oranges, spreads for high
 7 yield is on Treasuries. So, that the 6 percent, 600
 8 basis points spread and your bond -- and your bond at 2
 9 percent, that's 8 percent.
 10 But bank loans generally priced off the
 11 LIBOR; LIBOR is right now at about zero, maybe a little
 12 above that. Because of that, new issues investors are
 13 insisting on whether it was referred to as LIBOR floors.
 14 So, instead of having a spread over LIBOR, if LIBOR is
 15 where it is, it have to be at least 1 percent or 1.5
 16 percent, a LIBOR floor in a lot of new issues in the
 17 market. So, the blue line is price on LIBOR.

18 The yield that we show on page 14, blue, is
 19 the high yield index. And at the time we ran it, this
 20 is about 8 percent, the yields maturity. Because bank
 21 loans reset many times every month, many times
 22 quarterly, we show the current yield which is about 5
 23 percent; so of course, you have a higher capital
 24 structure, you have a lower yield.

25 CHAIRPERSON AARONSON: Can I ask you that

0048

1 next time you put together this chart -- you seem to
2 split on some pages, the high yield is red some pages --

3 MR. GANTZ: Larry pointed that out to me.

4 MR. SCHLOSS: I pointed it out to him. Of
5 course he didn't change it.

6 (Laughter.)

7 We might take his little name plate away.

8 MR. GANTZ: At least misspell my name.

9 (Laughter.)

10 On page 15, we summarize, where we own the
11 bank loans? When we have this portfolio? When we
12 mentioned that in 2008, it allows the high-yield manager
13 to own it and in fact sure enough in 2009 we changed
14 guidelines and the managers did buy them. But as prices
15 came back up, they started to sell them. So, the amount
16 that we have right now in the high-yield portfolio is de
17 minimus, and most managers actually have zero.

18 The managers that are typically attracted to
19 bank loans than the high-yield portfolio are the
20 defensive managers, reasons they're defensive managers,
21 so they're looking at that. But because of the tracking
22 error versus the benchmark, they are not in the
23 high-yield benchmark. They are cognizant of that as
24 well. So, unless there is a compelling evaluation, they
25 may avoid bank loan in the high-yield portfolio unless

0049

1 there is like a low valuation as there was a few years
2 ago. But defensive managers do own some. The rest of
3 managers will own them when there is a market
4 dislocation.

5 So, for instance, last September (unclear)
6 managers were buying bank loans because there were
7 opportunities as prices dropped. But right now, as the
8 market has recovered, or where the market is right now,
9 they own a lot less. So, the amount that we own right
10 now is pretty much de minimus and it's really a function
11 of what's going on in the market.

12 Well, we do own some of them. As Larry
13 mentioned, they are opportunistic fixed income
14 portfolio. But that's also is dependent on the market
15 dynamics, but this is exactly what we want. The
16 opportunistic managers are going to be owning bank loans
17 in two places. They are going to be owning performing
18 loans, which is pretty much what we've been referring to
19 and our policy allows us to lever modestly up to one
20 time.

21 So because of special situations or levered
22 one time, or they own distressed bank loans because they
23 know in the structuring process they can be dispriced
24 because certain investors are required to sell insurance
25 company may be required to sell, and that distorts the

0050

1 price, so they'll be able to pick up cheaper prices and
 2 that's exactly what you want your opportunistic manager
 3 to do. So, it will depend on market cycle, it will
 4 depend on where we are in the markets. But as Larry
 5 mentioned, strategic opportunistic managers are doing.
 6 So, in some bank loans are pure credit, they
 7 are floating rate, don't have duration, or much duration
 8 at all. They're senior in the capital structure. So,
 9 you are safer than high-yield bonds in what your
 10 recovery rate would be if there is a problem. They have
 11 lower volatility, significantly lower volatility
 12 actually, than high-yield. And as I mentioned earlier,
 13 we'll be coming back to you next month with the results
 14 of our bank loan search.

15 So, that's my piece. Unless you have any
 16 questions.

17 CHAIRPERSON AARONSON: Any questions on the
 18 high-yield bank loans?

19 Thank you very much.

20 MR. SCHLOSS: So, that ends the public
 21 agenda on the pension fund.

22 CHAIRPERSON AARONSON: Thank you very much.
 23 Now we can go to the public agenda of the passport
 24 funds.

25 MR. LYON: Good morning.

0051

1 CHAIRPERSON AARONSON: Good morning.

2 MR. LYON: I'd like to start by talking
 3 about the performance through March 31st and asset
 4 allocation as of March 31st for the Passport fund. I'm
 5 going to start with the diversified equity fund. And
 6 this was sent out, copies were distributed of everything
 7 I'm going to talk about.

8 So, as of March 31st the fund was back over
 9 the \$10 billion threshold at \$10.03 billion in market
 10 value, and the asset allocation was fairly close to
 11 target with the biggest difference as being of 1.5
 12 percent overweight to the passive U.S. equity segment
 13 and slightly smaller than that underweight to
 14 international equities.

15 And when you look at performance, March was
 16 another positive month generally for domestic equity
 17 which dominates the allocation here in the diversified
 18 equity fund.

19 So, if you go to page 3, you can see the
 20 middle of the page, first column of numbers, that the
 21 return net of our fees for this fund was 2.4 percent for
 22 the month bringing the year to date or quarter, one and
 23 the same return, to positive 12 percent just in three
 24 months.

25 So, it was April being slightly negative

0052

1 when it comes to that. There are frozen things here and
 2 locked it in for the year. In any case, it's a great
 3 start, of course, to the year.

4 And when you look at what was behind the
 5 month's returns, really domestic equity in general
 6 helped and both the international and defensive
 7 composites lagged for this particular time period. Over
 8 the course of the calendar year to date so far the first
 9 quarter you can see that it is the defensive composite
 10 that has been the lowest performer, still up 6.3
 11 percent. So, pretty strong returns for something that
 12 that's not as equity sensitive in a strong equity
 13 market.

14 The international hasn't lagged nearly as
 15 much, only 50 basis points roughly behind the total
 16 fund, so up 11.5 percent. So, it had been a lag over
 17 the past year. For instance, if you look at the
 18 trailing one year period, you can see the total Variable
 19 A fund for short, and it was up almost 5.5 percent,
 20 while international equity were down about 5.5 percent.
 21 So, that's the course of it, so far in 2012.

22 And we don't always cover this, but I
 23 thought this would be helpful and maybe we'd point the
 24 since inception results on page 5. It's always in the
 25 report, however, and what we have here for a variety of

0053

1 starting dates, managers since inception, the relative
 2 results and kind of just two summary statistics
 3 including the three indexing accounts. There are 26
 4 different accounts underlying the diversified equity
 5 fund with different managers, and 20 of the 26 are ahead
 6 of their respective benchmark since inception to varying
 7 degrees on a net of fee basis.

8 And of those that are behind, all but one
 9 that are behind, less than a percent, in some cases by
 10 arguably rounded error or less than the fees. And so of
 11 those that are ahead of the benchmark, those 20 out of
 12 26 managers that also currently represents about 88
 13 percent of the assets.

14 So, that's the report on the diversified
 15 equity fund.

16 Now, we have a separate handout for the
 17 other Passport fund options and also through March 31.
 18 The first option is the bond fund, formerly the stable
 19 value fund; and the bond fund has about \$382 million as
 20 of the end of the first quarter, and you can see its
 21 performance which is shown for the time period since it
 22 became a market value option at essentially the
 23 beginning of the year.

24 And you can see that for the month on a net
 25 of fees basis the bonds was down about four basic

0054

1 points. That was still five basic points better than
2 its benchmark and all these reports are net of fees for
3 the quarter than were -- we have a 72 basis points
4 positive return, which is a little ahead of the
5 benchmark.

6 You can see how the assets from the top
7 right of the page are broken out by the underlying
8 managers and the strategies.

9 Then on page 2, we have information about
10 the international equity fund and the international --
11 as well as the inflation protection socially responsive
12 fund.

13 We'll start with the international equity
14 fund. That was about 75 and a half million dollars in
15 the quarter end. You can see the performance in the
16 first of the three performance tables just focusing on
17 the folded rows right in the middle of each. The total
18 international equity fund was down six basis points,
19 that was 34 basis points better than EAFE for the month;
20 and for the one-year period although it had negative 4.8
21 percent return, but it was still ahead of the EAFE
22 benchmark, about half a percent.

23 The inflation protection fund had 28 and a
24 half million, roughly, at quarter end and the
25 performance was about negative half a percent; but ahead

0055

1 of the U.S. TIPS benchmark, which is negative .4
2 percent, slightly behind, I should say.

3 And for the one-year period, this fund has
4 trailed -- it has 5.5 percent return of the underlying
5 mutual fund of 5.3 percent return of the total
6 investment option, which includes cash flows and cash
7 positions; and that was several percent behind the TIPS
8 benchmark.

9 We don't expect to track these benchmarks
10 over a short time period, but over the long haul --

11 And lastly, the socially responsive equity
12 fund, \$37.4 million as of quarter end; and this fund has
13 also lagged over more recent periods for the month and
14 the one year more significantly. And we'll be following
15 up and reporting back to you at the September meeting,
16 as we'll be meeting with this manager as part of our
17 rotating annual reviews. They're scheduled for the next
18 round of meetings, and we'll be talking about that in
19 more detail, reporting back to you.

20 And when you look at the since inception
21 page, on page 3 for this option, can you see the
22 inceptions positive results; and all of the since
23 inception results for the investment options are ahead
24 of their respective benchmarks.

25 Any questions?

0056

1 So, then, the last thing that we have for
 2 the public session is the preview of April performance
 3 for U.S. Equities. April was a modest and negative
 4 month for many parts of the fixed income market. It was
 5 a positive month and for the international market, for
 6 U.S. based investors and negative months. So when we
 7 look at diversified equity funds benchmark, it's down
 8 around 0.6 percent and we expect the diversified equity
 9 funds to be something in that neighborhood once the
 10 results are in.

11 You can see also for the strategies, these
 12 underlying mutual funds, the inflation protection
 13 opposite we expected would have been a positive month.
 14 And the social responsive equity not surprisingly are
 15 negative, in line with the overall equity market. So
 16 they look again to be behind the benchmark.

17 So, that's everything we had for the public
 18 session for the Passport funds; unless anyone else has
 19 anything to add?

20 CHAIRPERSON AARONSON: Any questions for
 21 Chris?

22 Thank you very much. That covers all of the
 23 matters that we have to cover in public session.

24 Do I hear a motion?

25 MS. MARCH: I make a motion that we go into

0057

1 executive session under the Public Officer Law 501, for
 2 the purpose of discussing sales and securities.

3 CHAIRPERSON AARONSON: Do I hear a second?

4 MR. SCHLOSS: Second.

5 CHAIRPERSON AARONSON: Any questions?

6 Ready to vote? All in favor say "Aye."

7 (A chorus of "Ayes.")

8 Nobody opposed.

9

10 (At this time, the meeting went into executive session.)

11

12 Do I hear a motion to leave executive

13 session?

14 MS. MARCH: So moved.

15 CHAIRPERSON AARONSON: Any second?

16 MS. EMERY: Second.

17 CHAIRPERSON AARONSON: Any discussion? All
 18 those in favor?

19 (A chorus of "Ayes.")

20 Seeing nobody opposed, we're out of
 21 executive session. And we have two things that we have
 22 to take care of. We have to meet a new employee of the
 23 Comptroller's Office, and we have to get a summary of
 24 the executive session, so I think we'll get summary
 25 first.

0058

1 MS. STANG: In the executive session of the
2 variable funds, updates to managers were presented.

3 In the executive session of the pension
4 fund, several manager updates were presented. There was
5 a discussion of an ETI investment program. A real
6 estate investment was presented and discussed, and
7 consensus was reached, which will be announced at the
8 appropriate time.

9 A private equity investment was presented
10 and discussed and consensus was reached, which will be
11 announced at the appropriate time.

12 MR. SCHLOSS: As you know, we're going
13 through the asset allocations and discussions of ways to
14 expand. The first part of the portfolio we talked about
15 infrastructure in the past. We've hired Petra, and I'll
16 let Petra go through her bio. But at some point working
17 with all the consultants, we're going to come back to
18 you with a plan, a recommendation for how to invest the
19 infrastructure. But we're just starting it.

20 MS. NIKOVA: It's a pleasure to be here.
21 Thank you for having me. I'm Petra Nikova. Since the
22 gentleman who introduced themselves today started with
23 theirs, I would say that I did my master's degree in
24 public administration here in the U.S. in the market
25 school. I'm originally from Bulgaria. So, I have

0059

1 accent, if you're wondering.

2 MS. MARCH: It's a New York accent.
3 (Laughter.)

4 MR. SCHLOSS: Eastern Europe.

5 MS. NIKOVA: I started my career with
6 infrastructure, actually, in my prior life in Bulgaria
7 infrastructure longs with the EBRT European
8 Reconstruction Development Bank and New York Investment
9 Bank.

10 After graduating here, I started with MBIA.
11 After a short time with department of management and
12 budget. So, with MBIA, I spent a lot of time doing many
13 people finance and infrastructure finance, both in the
14 U.S. and the U.K. as well as a little bit of Australia.

15 In the last four years, I spent with the
16 European banks doing infrastructure as well, primarily
17 in North America. So, I have pretty much spent my
18 career in infrastructure financing, one form or another,
19 and the government or the private sector.

20 MS. MARCH: Welcome.

21 MR. SCHLOSS: You are going to hear more.
22 With that, that's the end of our agenda for the day.

23 CHAIRPERSON AARONSON: And does that
24 complete the Passport, or we are now ready for
25 adjournment?

0060

1 Do I hear a motion?
2 MS. ROMAIN: So moved.
3 CHAIRPERSON AARONSON: A second?
4 MR. SCHLOSS: Second.
5 CHAIRPERSON AARONSON: Do I see any
6 discussion?
7 Any opposition to adjourn?
8 Then we are adjourned.
9 (Time noted: 1:54 p.m.)

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0061

1 C E R T I F I C A T I O N
2
3 I, Jeffrey Shapiro, a Shorthand Reporter and
4 Notary Public, within and for the State of New York, do
5 hereby certify that I reported the proceedings in the
6 within-entitled matter, on Thursday, May 3, 2012, at the
7 offices of the NYC TEACHERS RETIREMENT SYSTEM, 55 Water
8 Street, New York, New York, and that this is an accurate
9 transcription of these proceedings.
10 IN WITNESS WHEREOF, I have hereunto set my
11 hand this ____ day of _____, 2012.

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JEFFREY SHAPIRO