

1 TEACHERS' RETIREMENT SYSTEM OF THE CITY OF NEW YORK

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3 INVESTMENT MEETING

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7 JOHN DORSA, OFFICE OF THE COMPTROLLER, TRUSTEE

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10 VICTORIA LEE, TRUSTEE

11 CHRISTINA MCGRATH, TRUSTEE

12 Also Present:

13 VALERIE BUDZIK, TRS

14 LIZ SANCHEZ, TRS

15 PRISCILLA BAILEY, TRS

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17 MIKE PUGATCH, HARBOURVEST
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1 (The proceedings commenced at 10:26 a.m.)

2 MS. REILLY: Good morning. Welcome to the
3 June 6th, 2024 Investment Meeting of the Teachers'
4 Retirement Board. I'll start by calling the roll.

5 Tom -- I'm sorry. Kevin Liu.

6 MR. LIU: Kevin Liu for Mayor Adams, present.

7 MS. REILLY: Thomas Brown?

8 CHAIR BROWN: Good morning, Patricia.
9 Present.

10 MS. REILLY: Anthony Giordano?

11 MR. GIORDANO: (Indiscernible) Greg Faulkner.

12 MS. REILLY: Alison Hirsh?

13 MS. HIRSH: Alison Hirsh on behalf of
14 Comptroller Brad Lander.

15 MS. REILLY: Victoria Lee.

16 MS. LEE: Here.

17 MS. REILLY: Christina McGrath.

18 MS. MCGRATH: Good morning. Present.

19 MS. REILLY: Good morning. We have a quorum.
20 I'll turn it over to the chair.

21 CHAIR BROWN: Great. Good morning, everybody.
22 And I'd like to welcome Christina McGrath, first time at
23 the TRS --

24 MS. MCGRATH: Thank you.

25 CHAIR BROWN: -- member trustee, so welcome.

1 MS. MCGRATH: Thank you.

2 CHAIR BROWN: Pleasure.

3 So first on the agenda, Passport Funds First
4 Quarter 2024 Performance Review, and we'll go to
5 Rocaton, Mike or Amanda.

6 MS. JANUSZ: Yeah, so we -- the first
7 quarterly report is posted to Convene. We did review it
8 in the last monthly meeting, the March results. So
9 unless there's questions on March, I think we'll skip to
10 April.

11 Starting with April results -- this full
12 screen here.

13 Okay. So after a very strong start to the
14 year in the first quarter, we did see, in April, a
15 pullback in both equity markets and bond markets after
16 really, especially for the S&P, five very strong months
17 of gains. And in April we saw, you know, a bit of a dip
18 in investor confidence, particularly because we had seen
19 three months in a row of inflation that surprised to the
20 upside. So a bit of concern about what that means for
21 the Fed beginning to cut rates, the timing of one that
22 will begin, and also the amount of rates we may see
23 between now and the end of the year. So that caused a
24 bit of a performance challenge for both equities and
25 fixed income markets during April.

1 If you look at the returns for the month, in
2 this first column, first performance column, you can see
3 for the Diversified Equity Fund where the bulk of your
4 assets sit in the Passport Funds, you were down just shy
5 of 4 percent for the month of April, but still up
6 4-and-a-half percent year-to-date through the end of
7 April.

8 And looking at the month, so your US equity
9 component of the Diversified Equity Fund was down
10 between 4 and 5 percent, whether it's the active or the
11 passive sleeve. The international equity sleeve fared a
12 bit better, and that was really buoyed by the emerging
13 markets component, which was one of the only positive
14 areas during the month of April, which really benefited
15 from a rebound in China.

16 The Sustainable Equity Fund, about two-thirds
17 of the way down the page, was the worst performing
18 option for the month, down about 5-and-a-half percent.
19 Tech was one of the hardest hit sectors during the
20 month, and that sort of large cap growth asset classes
21 were dominated by tech stocks, but that fund has been
22 one of your strongest performers, and continues to be.
23 It's up close to 5 percent year-to-date and up over 28
24 percent on the one-year period.

25 So with that, are there any questions on

1 April? If not, we can switch over to some preliminary
2 results for May.

3 So the good news is that May results were
4 better. So we did have a little bit of a rebound in
5 May, after a disappointing month of April. Some of the
6 things that helped in May, we saw CPI prints that were
7 in line with expectations after those three that
8 surprised to the upside, right? So that gives us a
9 little confidence that we are headed in the right path
10 in terms of inflation and expected Fed activity for
11 later this year. We also saw strong Q1 earnings here in
12 the US and a bit of relief in terms of US wage growth.

13 So in terms of market results for May, the
14 Russell 3000 index, which, you know, represents all cap
15 US equities, was up close to 5 percent for the month,
16 4.7, and on a calendar year-to-date basis, through the
17 end of May, is up over 10 percent.

18 And then international markets have not fared
19 quite as well as US. You have the MSCI EFA index, which
20 represents developed non-US markets up just shy of 4
21 percent in May and up 7 percent year-to-date. And then
22 emerging markets, which did better in April, didn't
23 quite keep pace in May, up around a half a percent for
24 the month and about 3-and-a-half percent year to date.
25 So encouraging results across the board for May after a

1 week or month of April, and I think puts us kind of back
2 on track in terms of expectations again for the Fed to
3 begin decreasing rates later this year. Although, as we
4 approach the election cycle, I think there is, you know,
5 more uncertainty about whether that begins before or
6 after the election.

7 CHAIR BROWN: Questions for Amanda or Mike?
8 Great, thank you.

9 We move on to the Pension Fund Performance
10 Update Quarterly Presentation. Steve, with 16 days to
11 go, what do you have for us?

12 MR. MEIER: It's a little more than 16 two
13 days, it's 42 days, and then we have a holiday on
14 Juneteenth, trading days. So I do have those
15 statistics, and I do --

16 (Crosstalk.)

17 MR. MEIER: Sorry?

18 CHAIR BROWN: It's fewer than 16 days.

19 MR. MEIER: Well, the last day of the quarter
20 is the June 28th, which is Friday. So yeah, so that's
21 what we're working towards, but the numbers are pretty
22 good. So I'm actually going to give you a little bit of
23 a history lesson, which I'll try to spice up with some
24 comments about April and May --

25 CHAIR BROWN: We'll take it.

1 MR. MEIER: -- as well. So before we get into
2 the presentation, maybe just a couple of reminders. As
3 long-term investors, we are flawed in terms of looking
4 at these performances on a monthly or quarterly basis.
5 We should be thinking more along the lines of 10 years,
6 and when I think of 10 years, we're not a thematic
7 investment, but there are some big macro themes out
8 there. I refer to them as the five Ds.

9 Those are demographic changes in terms of an
10 aging population and the impact on labor force dynamics.
11 Deglobalization and the move to address supply chain
12 issues and move a lot of production, hopefully onshore
13 nearshore, to various countries, including certainly the
14 United States. Also the issues around decarbonization
15 of our economy and transition to cleaner sources of
16 energy. A new one or one that I've talked about in the
17 past is debt sustainability on the sovereign level. We
18 have about a \$28 trillion size economy. We have a
19 little over \$27 trillion in outstanding debt. So we're
20 getting very close to that 100 percent of debt to GDP.
21 I don't expect anything, the wheels necessarily to come
22 up, but it's certainly something worth watching. We
23 have seen some sloppy Treasury auctions last week, twos,
24 fives, and sevens, and those are just indications that
25 there is either a flaw in the process of primary

1 dealerships in terms of how we distribute paper, maybe
2 the market is just getting full up and there's been less
3 appetite for Treasuries, but that is something we should
4 continue to watch.

5 The other D would be, I'm sort of cheating
6 here, I call it digitalization, which really the
7 transformation technologies and artificial intelligence
8 in particular. And these five Ds are all wrapped around
9 geopolitical risks as well, which we're very sensitive
10 to.

11 I have had a number of conversations with
12 folks recently, I had one yesterday, a meeting where
13 someone actually reflected, from a Washington think
14 tank, that the risks we see right now parallel what we
15 saw in 1913, 1939, And 1954. So these are dangerous
16 times in terms of we have a ground war in Europe, we
17 have an alliance between Russia and China and Iran, we
18 have got obviously disruptions in the Middle East, and
19 continued saber rattling on the part of China as it
20 applies to Taiwan. So more to think about.

21 These mega trends that I'm talking about, we
22 always look to see how these impact growth, inflation,
23 and productivity long-term, and the impact on government
24 spending, and last, but certainly not least, private
25 investments. So that's why we look at these things.

1 With that statement, maybe move to the next
2 slide.

3 Just real quick and I'm going to try to keep a
4 pace that surpasses our recent corporate challenge days
5 last week, but inflation is coming down. We have a
6 disinflationary trend that's still intact. It's slowed
7 here, and it's slow a little bit abroad, but again, you
8 still continue to see inflation move lower.

9 To Amanda's point earlier, we did have a
10 little bit of a surprise early in the year, so January
11 CPI, just as a reminder, was 3.1 percent. February CPI
12 was 3.2 percent. March CPI was 3.5 percent. Again
13 moving, in the wrong direction. So to Amanda's point
14 earlier, there was relief when we saw April's numbers
15 come at just 3.4 percent. So a little bit of challenges
16 there.

17 On the next slide, just a quick look at those
18 charts. So you can see on the top, in white, a little
19 cut off, but it's 3.4 percent for CPI and core PCE,
20 fixed preferred measure are about 2.8. That actually
21 rounds up, you can't see the 5 on the side.

22 On the next slide, just an example of how this
23 trend in terms of the rapid increase in inflation
24 following the pandemic, tightening higher interest rate
25 policy driving inflation down again. But you can see on

1 the far right-hand side, those declines have stalled a
2 little bit. The US is in red. You can see how we kind
3 of went sideways and up a little bit, but again, the Fed
4 has confidence that the level of inflation will continue
5 to come down. And again, this is a 20-year chart that
6 also includes the global financial crisis, so just from
7 a historical perspective.

8 On the next slide, US labor market remains
9 really quite strong. We get a non-farm payroll report
10 from May tomorrow morning at 8:30. Expectations are
11 that we'll probably see another 185,000 jobs created and
12 a stable rate of unemployment about 3.9 percent, but it
13 is something certainly worth watching.

14 On the next slide, just a look at that. I
15 think the other important takeaway here is you can look
16 at the labor force participation rate in yellow. It's
17 still about one percentage point below where was
18 pre-pandemic, and I think that has something to do with
19 demographic issues, about people nearing retirement, and
20 I think the pandemic probably pushed a number of people
21 into early retirement associated with those disruptions.
22 So we haven't really gotten back to that high watermark.

23 And on the bottom, you can see on the far
24 right-hand side, 3.9 percent unemployment, which we have
25 expect to see again for the month of May.

1 Is it possible to shrink the chart on the
2 right so we can -- yeah, thank you very much. Great.

3 On the next slide, US economic growth, as I
4 said, has been slowing but still moderately okay. We
5 have seen some slow down in existing home sales
6 associated with higher mortgage rates, and actually
7 relatively high housing prices, and consumer spending
8 and retail sales has slowed down for a number of the
9 cohorts, particularly the bottom half of those on the
10 income bracket.

11 On the next slide, a 10-year chart of GDP
12 growth around the world. You can see it's the massive
13 disruptions associated with the pandemic and the
14 recovery, but we're really kind of getting back to
15 normalcy now. We had preliminary GDP reports for the
16 first quarter of the US at less than 1 percent. It's
17 actually been revised up to 1.2 percent, so still within
18 shouting distance of trend for growth year.

19 On the next slide, in terms of official
20 interest rate policies, they have been quite steady.
21 However, today, we did have the ECB cut rates 25 basis
22 points. They're the second central bank to cut rates in
23 two days. Bank of Canada reduced rates as well, 25
24 basis points yesterday. So the interest rate cutting
25 cycle has actually begun.

1 Right now, Fed fund futures contracts are
2 pricing in about 42 basis points of cuts in the United
3 States, and that basically is a fancy way of saying it's
4 cutting in one full 25 percent, 25 basis point cut. As
5 Amanda said, probably September is the best estimate
6 now, but it may be right after the election, the
7 November 7th. Actually, the Fed meeting that week is a
8 day later. It's a date late because of the election.
9 And we'll continue to watch that. We have a fed meeting
10 next week and there's no expectation of rate changes
11 then.

12 On the next slide, just a look in terms of
13 where we are. So as I said, for the first quarter of
14 this year, very stable rates, with one major exception,
15 and it's a little nuance. In the bottom, actually the
16 Bank of Japan raised rates, raised official rates for
17 the first time since 2016. They had a negative 10 basis
18 point rate. Now they have a range of zero to 10. So
19 again, that's a return, I would say, to more normal
20 conditions, as they were the last large central bank to
21 maintain negative rates.

22 On the next slide, just in terms of long-term
23 government interest rates, they have been pretty
24 volatile, as I know Ed will talk about a little bit
25 during his presentation of risk, but they have actually

1 been generally higher. The US Treasury 10-year yields
2 started out the year at around 385. This morning, they
3 were at about 432. They have been as high as 470. So
4 volatile and higher and higher bond yields means lower
5 bond prices, and you'll see that in some of the
6 performance numbers in a moment.

7 On the next slide, just a look at the inverted
8 yield curve. That's a fancy way of saying that short
9 rates are higher than long rates, and typically, when
10 you invest out on the longer time horizon, you expect to
11 get some kind of premium for taking on an additional
12 risk. On the bottom, in that blue line, you can
13 actually see that was actually the yield curve, which is
14 positive, and normally slopes positive and moving higher
15 out to maturities. That was right before the Fed
16 started cutting rates in 2021 (indiscernible) the year.
17 Right now, we're where the red line is up top. So we
18 still have T-bill rates around 530, and as I said
19 earlier, 10-year Treasuries around 432 and two-year
20 Treasuries around 475. So again, short rates are still
21 higher than longer rates, which is unusual.

22 This has actually been the longest inverted
23 yield curve in the history of the Treasury markets.
24 It's not necessarily the highest level of inversion.
25 We're still about 44 basis points, and at its peak in

1 the 1980s, it was about 190 basis points inverted.

2 Maybe skip the next slide, it's just more
3 interest rate stuff.

4 This is actually more interesting, credit
5 spreads. So credit spreads, this is a fancy way of
6 saying credit spread, so look at the orange line up top.
7 It's at 296 basis points, let's say that's 3 percent.
8 That's actually the spread that an investor earns for
9 taking a high yield bond, it's a spread above what
10 Treasury's yield, comparable maturities, and as credit
11 spreads come down, bond prices actually go up, and this
12 has occurred in both high yield, in yellow, and
13 investment grade, in white. I don't necessarily believe
14 these levels are necessarily compelling, these spread
15 levels are, but they're the result of two things.

16 Firstly, a stretch for absolute yield. These
17 yields look attractive because base rates have moved up,
18 so investors are putting more money to work in bonds
19 now. It's also expectations of a soft landing. If the
20 Fed is able to pull off a slowing of the economy and
21 getting inflation down, without tipping the country into
22 recession, that will mean, hopefully, less defaults,
23 which means less credit risk, and that's why spread
24 credit spreads are tight.

25 On the next slide, just a couple of comments.

1 US stock markets have been significantly higher this
2 year. Amanda was absolutely dead on, a little bit of
3 volatility in April, but May was just an extraordinary
4 month in terms of returns. And non-US developed markets
5 have also moved higher as well.

6 A couple things of note, just yesterday NVIDIA
7 passed the \$3 trillion market cap level, which is
8 phenomenal in terms of the runup in terms of the value
9 of that company. There are two other companies that
10 currently have that moniker of \$3 trillion and more of
11 capital, of market cap, and those are Apple and
12 Microsoft. This is the first chips company ever to make
13 that level of market capitalization.

14 We were also looking at this last week in
15 terms of the Mag seven. (Indiscernible) took out Tesla
16 because of the poor performance. And in aggregate
17 across the five public pension plans, and I should get
18 you your own stats, but we have over \$15 billion worth
19 of holdings just in six companies, Amazon, Alphabet or
20 Google, Apple, Microsoft, Meta, and NVIDIA at this
21 point. So significant runup and a big portion of the
22 portfolios, for the Teachers' Retirement System as well.

23 On the next slide, just a look at those
24 returns. So in the one-year period, again ending the
25 first quarter of this year, for one year on top, Russell

1 3000, and I'm picking on this for a reason, note the
2 fact that the one-year returns just for the Russell 3000
3 were 29.3 percent. I'll talk about that a little bit
4 when I talk about performance and spreads in a moment.

5 You can see again, anything with duration has
6 still struggled because interest rates have moved up,
7 yields have moved higher, bond prices moved down, and in
8 the first quarter of the year, certainly no change
9 there. It was down 2.2 percent. Three years, a little
10 bit more painful with the significant backup in rates,
11 again following the Fed's rate hiking cycle in 2022.
12 And with the Treasury and ADC plus five, meaning final
13 maturity plus five years down 5, over 5 percent.

14 Skip the next slide line.

15 This is interesting. It's interesting to me.
16 These are 10-year sovereign bond yields across the
17 curve. So up top, you see the United States. That's
18 our US Treasury 10-year yield. It is 53 basis points
19 higher than where it started the year. Again, it's a
20 little stale because markets have moved quite
21 substantially since this print a couple of weeks ago.
22 But what's interesting is all the yields on the far
23 right-hand side for all the sovereign 10-years is up.
24 Bond prices are generally lower, and the cost of
25 borrowing and interest rates for sovereigns for

1 government entities is higher. One exception is China
2 at the very, very bottom, and their yields have come
3 down because the economy has been quite weak.

4 Skip the next slide, Wilfredo? Yep. Yep.

5 Private equity distributions or exits has
6 still been relatively low, certainly relative to where
7 they were in 2021. Eneasz can speak more intelligently
8 about that in a few moments. As well as the private --
9 public and private credit spreads have actually all
10 tightened in, again a stretch for yield and expectations
11 of a soft landing again to decrease the levels of falls.

12 On the next page, some food for thought, and
13 here, we're really trying to talk about the importance
14 of private companies, and by extension private equity,
15 to the importance of the US economy. Here, you can see
16 that 87 percent of companies, firms within the United
17 States with revenues greater than a hundred million are
18 private.

19 Remember, we had Robert Smith from Vista in
20 here and he talked about the fact that 98 percent of all
21 software companies are private, and those are some
22 substantial companies. So again, just underscoring the
23 fact that the public companies that are traded on the
24 stock exchange are only a small portion of the US
25 economy.

1 On the next slide, also job creations, why
2 private companies are so important to the US economy.
3 Almost 80 percent of all job openings today are in
4 companies that have between one and 250 employees.

5 On the next slide, a look at employment for
6 the S&P 500 companies, some of the biggest companies in
7 the world, it's just little more than 18 percent of the
8 aggregate of employers in private sector in the United
9 States.

10 Maybe skip the next two slides.

11 And really, speak a little bit more to
12 corporate, corporate profits. So half of all US
13 corporate profits come from non S&P 500 companies.
14 Again, so a substantial number of smaller companies that
15 may be still listed but on the S&P 500, but more of
16 that's driven by private companies in the blue up top.

17 Maybe skip ahead two slides. Again, I'm
18 trying to keep it spicy.

19 This is actually really interesting in terms
20 of where we have come from an interest rate standpoint.
21 We're trying to throw some different slides at you.
22 What's interesting about this slide is it does show that
23 the market is pricing in higher interest rates for a
24 longer period of time. It was actually one of the
25 warnings that the Bank of Canada's chair gave yesterday

1 when they cut rates 25 basis points, he said don't
2 expect interest rates to move back to levels where they
3 were pre-pandemic, and that's sort of an indication of
4 what's expected being priced in here.

5 On the next slide, under food for thought,
6 just to look at yields, this is where we are across
7 various types of debt, and you can see where the levels
8 are approximately now in those blue diamonds relative to
9 where they have been on average over the last 10 years
10 in those gray bars. So a substantial increase in the
11 level of yields. This is important for investors
12 because your fixed income investments will be kicking
13 off a little bit more return from a yield standpoint,
14 cash flows from a yield standpoint.

15 On the next slide, food for thought, just in
16 terms of private credit, we have a significant amount of
17 obligations in both in high yield and leveraged loans
18 coming due over the next four years, about \$1.6
19 trillion. It's called a maturity wall. And I think
20 this will be great opportunities for private credit and
21 investors to put money to work.

22 Maybe two slides ahead?

23 We talked a little bit about the soft landing
24 in the context of corporate bond spreads. Defaults are
25 up. You can see that on the far right-hand side where

1 the Fed started raising rates. The default rates have
2 moved higher in both loans and high yield bonds, but
3 again, not to levels that are necessary of concern, but
4 something worth watching.

5 On the next slide, this may sound arrogant,
6 but it's referred to as US exceptionalism, and it
7 actually looks at the S&P 500 market cap, market
8 capitalization, added all 500 companies together. The
9 valuation has gone from, you can see back in the global
10 financial crisis, from a low of about 23 percent to
11 upwards of 38, almost 40 percent of global market cap
12 for all stocks around the world is now in the S&P 500.
13 And again, a lot of that has to do with the Microsoft,
14 the Apple, and the NVIDIAs of the world that are worth
15 over \$3 trillion at this point.

16 On the next slide, touching again on one of
17 the themes we talked about earlier, one of the drivers
18 for potential stagnation and growth is the demographic
19 changes. And this is actually a very long-term chart
20 that looks out to 2,100, 2,100 year in terms of where we
21 are on a forecast basis of working age population. So
22 right now, we're at about 65 percent of working age
23 population, a little less than that, in terms of labor
24 force participation rate in the States, and that is
25 looking to decline to levels below 55 percent over the

1 course of time. So those dynamics, the aging global
2 population will have an impact on labor force pricing
3 and cost of wages.

4 On the next slide, again just to emphasize
5 again what the market is pricing in, in terms of when
6 rates start to move down, even out until 2030, it's not
7 pricing in rates going bare bones where they were
8 pre-pandemic, and I think this is right. Some of this
9 has to do with the level of sovereign debt we have
10 outstanding. We now have an interest expense to finance
11 our \$27 trillion in outstanding US Government Treasury
12 debt that exceeds our Defense budget. It's over \$1
13 trillion a year just to pay the interest on that gap,
14 which takes a bite out of the budget.

15 On the next slide, just in terms of interest
16 rates -- oops. Yeah, this is it. Share of mortgage
17 free homes. So almost 40 percent of US homes don't have
18 a mortgage, which I think is obviously a very positive
19 trend, which means that the interest rate hikes that the
20 Feds put in place has been somewhat less impactful on
21 the economy because some of these homes, again
22 associated with an aging population, are outright owned.

23 On the next slide, kind of a different spin on
24 the same theme, almost 57 percent by volume of mortgages
25 outstanding now have fixed interest rates below 4

1 percent. That means those debts, there's still debts,
2 but they certainly feel like assets, given the fact that
3 private mortgages are a little over 7 percent. So just
4 something to think about in terms of why people may be
5 less likely to sell their existing homes and what that
6 may do to housing prices over time.

7 Let's see, just wrapping up on the next slide,
8 house price expectations. So on the far right-hand
9 side, investors that own homes still expect them to do
10 quite well. Right now, the expectation for homeowners
11 is to see increases on average of around 4-and-a-half
12 percent, which would be an interesting outcome if that
13 actually holds true.

14 All right. Now, shifting over to Teachers'
15 Performance reporting. So on the -- two slides forward.
16 Yep. One more. Yep.

17 So this is the slide that reflects where your
18 performance has been for the last year. You can see on
19 the far left-hand side, in the one-month area, your
20 portfolio, your total plan is actually in the mustardy
21 orangey yellow on the far left. And you can see how
22 that stacks up relative to your new strategic asset
23 allocation policy returns relative to a public market
24 equivalent of 65/35. And again, some of that has to do
25 with the tremendous runup in equity prices more

1 recently. But again, if you focus out further out the
2 curve, you look out five years, what's nice is you see
3 all green on the screen, but out five years, your total
4 plans produce a return of 8.2 percent, consistent with
5 your policy benchmark, a little bit below public
6 markets. Again, I think that has more to do with some
7 of the recent mark to markets and exposure perhaps to
8 real estate.

9 On the next slide, this slide actually looks
10 at if you were to invest a thousand dollars over the
11 last 10 years with a 7 percent return expectation, where
12 would you be? And your portfolio value reflects that
13 you're above that 7 percent level, which is your
14 actuarially, a certain rate of return is 7 percent. So
15 having that orange line above the blue line in this
16 chart is positive.

17 On the next slide, a look at net public market
18 returns. And again, not to be too focused on
19 short-term, but in the three-month area, US equities
20 have had a really nice run, and that's actually just
21 through the end of March. But more importantly, in the
22 one-year space, that US equity number, again 29.8
23 percent of returns as measured by the Russell 3000, is
24 not to be expected every year, but certainly has helped
25 power the returns in the portfolio coming off of a very

1 challenging 2022 and early 2023. Focusing on the
2 long-term, though, if you look on the far right-hand
3 side, the returns have been consistently decent,
4 notwithstanding the fact that we had a tough 2022.

5 On the next slide, a look at public market
6 excess returns, or the returns above the benchmarks.
7 And here, you can see, in terms of equities, we have
8 actually underperformed recently in the one-year area, a
9 little bit more positive. In developed market XUS, on
10 the second line down, it's been a little more
11 challenging, and those are some of the issues we talked
12 about in terms of Bailey Gifford and one or two others
13 in that space have underperformed. Emerging markets
14 have performed quite well and somewhat consistently over
15 time. And again, it looks like a pretty good outcome
16 overall.

17 On the next slide, one of the things we're
18 trying to do is provide you with a little bit more
19 insight and transparency into the fees that you pay for
20 your managers. So this is in public markets only,
21 active and passive. So here, you can see there's
22 27-and-a-half million dollars in fees paid, again just
23 from public markets, fixed income and equities, in the
24 fourth quarter of last year. Actually, I beg your
25 point, I think that's misleading. I think that should

1 be first quarter this year. I might be wrong there.
2 Again, it's just, so if you take that times four, you're
3 paying well over a hundred million dollars in annual
4 fees for public market management. And this is the
5 breakdown. You can see a little over, what, 72, 73
6 percent are in equities, the balance being in fixed
7 income.

8 But again, this is something we want to
9 provide you Trustees with consistently over time. We're
10 trying to do more in terms of charting this. We're
11 trying to actually come up with a methodology to
12 reflect, I know Ed has given this a lot of thought, I
13 don't want to steal his thunder and overpromise, but to
14 try to come up with an evaluation of alpha or excess
15 return that's driven by each basis point of fee. It's
16 probably -- it's hard enough to do in the public
17 markets, it's even more challenging to do in the private
18 asset sector, but we're trying to get those analytics to
19 you, again to be more open and transparent around fees
20 and what we're doing to reduce fees throughout the year
21 every year.

22 I'd say the last takeaway on the bottom of
23 this chart, as you can see, for public market
24 management, again, passive and active, your total fees
25 average, across your assets, about 14 basis points, and

1 that's in the dark gray on the bottom.

2 On the next slide, excuse me, a look at after
3 fee returns in the private assets. You can see,
4 obviously, in the one-year space, core and non-core real
5 estate struggled a little bit. A lot of that has to do
6 with office space and retail space selling off a bit.
7 But consistently, if you look at 10 years, the after fee
8 returns have been quite healthy kind of across the
9 board.

10 On the next slide, a look at your performance
11 relative to your benchmarks. So private equity up top.
12 I mentioned, in the one-year area, you have
13 underperformed your benchmark of Russell 3000 plus 300
14 basis points by 2,152 basis points. That looks bad.
15 It's really not. Again, you have to put that in the
16 context that the Russell 3000 was up 29.5 percent over
17 that period of time. So again, it's a tough compare to
18 a public market benchmark right now. And again, if you
19 look out across the curve, the performance has been
20 pretty consistent and generally positive across most
21 asset classes.

22 On the next slide, a look at, again, trying to
23 increase transparency into your private assets. These
24 are commitments. So in the blue pie chart or the pie
25 charts, the blue is actually the assets that you have in

1 the ground now. Capital has been called and deployed
2 into your general partners that you have approved. You
3 also have another, say, let's look at private equity on
4 the far left, you have another \$4 billion, \$4.5 billion
5 worth of assets that have not yet been called but have
6 been approved by the Trustees, and again, will be put to
7 work over time.

8 And again, we have the same theme kind of
9 across the board. Opportunistic fixed income, you see
10 the unfunded slice is a little less, 70 percent of your
11 exposure in OFI or private credit is in separately
12 managed accounts. We typically are able to ramp those
13 up or move quicker in terms of the allocations there.
14 So again, you have more money that's in the ground,
15 notwithstanding the fact that that's a relatively new
16 asset class somewhat to, say, infrastructure.

17 And lastly, we have actually been rebalancing
18 to your new strategic asset allocations consistently,
19 first thing, first quarter as well is we're just about
20 completing it in the second quarter. But just a couple
21 of things to note. So your public equity allocations in
22 aggregate, we're going from 44.5 percent down to just 41
23 percent, and that's reflected here in terms of some of
24 the emerging markets selling, you see up top, and your
25 fixed income allocation is going from 32.5 percent down

1 to 29.5 percent. And again, that's reflective of the
2 increased exposure on a strategic asset allocation basis
3 into private assets.

4 I'd say the other two takeaways here is your
5 TIPS. We sold \$202,445,000 in TIPS. We have actually
6 gotten out of that asset class, and we redeployed it
7 into credit and mortgage product in terms of more fixed
8 income.

9 And last but not least on this slide, perhaps
10 most important is the cash position at \$320 million.
11 That was used to make certain capital calls, but most
12 importantly, to pay benefits to your beneficiaries.

13 And with that, any questions? I know we kind
14 of covered a lot.

15 CHAIR BROWN: Any questions? So where were we
16 again, fiscal year-to-date?

17 MR. MEIER: Fiscal year-to-date, well,
18 actually, I can give you the preliminary in Executive,
19 yeah, I have those stats. No, that's okay. That's
20 okay.

21 UNIDENTIFIED SPEAKER: Inquiring minds.

22 MR. MEIER: But it is 22 days until it's the
23 28th of June, and I don't know if the stock markets are
24 closed on Juneteenth, and the 19th.

25 CHAIR BROWN: Thank you. Interesting. Great,

1 thank you.

2 We move on now to --

3 UNIDENTIFIED SPEAKER: Are we doing risk?

4 MR. MEIER: The risk, yeah.

5 CHAIR BROWN: Quarterly risk update, and I
6 guess Steve is going to --

7 MR. MEIER: Actually --

8 CHAIR BROWN: -- turn that over to Dr. Berman.

9 MR. MEIER: Ed Berman.

10 CHAIR BROWN: Thank you.

11 MR. BERMAN: Thank you. It's always tough to
12 go after Amanda and Steve, but here we are.

13 So obviously, a very strong quarter from a
14 perspective, you know, these talk about soft lending. I
15 know (indiscernible) is not but definitely feels this
16 way. Inflation is down by any measure. CPI is 3.4.
17 GCE, which is the (indiscernible) preferred measure,
18 two-and-three-quarters. (Indiscernible) looks great,
19 nothing can ever go wrong. All public markets through
20 the roof. Europe did well, Asia did well, US did
21 accelerated well. The S&P is up 11 percent, 11 percent
22 risk. That's a sharp ratio of 2.0. This is really as
23 good as it gets. And I wish I could tell you that this
24 is good times for all along, this is the expectation.
25 So we don't celebrate success, it's a focus on the

1 negatives. It's a negative presentation by definition.

2 So when we think about risk -- we'll go to the
3 next page, please.

4 And as good as everything looks, the world is
5 very unpredictable, a lot of dangers, which Steve talked
6 about. But generally speaking, I get to look through
7 the changes in the market levels, the important to keep
8 in focus your portfolio is long (indiscernible), it's
9 structural position for long time. So it will
10 experience shorter volatility, and I think we need to be
11 comfortable with that.

12 But what's important to understand the risk
13 level, really just two factors. There's two things need
14 to keep in mind. The first one is the volatility. And
15 by that, I mean just how fast prices change in markets.
16 That's what you see on the screen right now. So on the
17 left-hand side, you see the VIX index, which is a
18 measure of equity volatility. It's split by quarters.
19 And the way this chart is presented, the bottom of the
20 chart is like 10 points of VIX, as good as it gets,
21 that's as low as it gets, and 40 points it's about close
22 to the upper end of the range. So you can see
23 immediately that whatever the market is telling you that
24 nothing will go ever wrong, all is good, VIX for this
25 quarter, for Q1, averaged at certain 13.7, so it's close

1 to all time low.

2 In fixed income, on the right-hand side, is
3 this MOVE index, things a little bit less rosy. So you
4 see it's closer to the middle of the range, so things
5 are not out of the woods, but still the fact is things
6 are getting better. So the MOVE index average to 105
7 (phonetic) this quarter, the trend is down. So all is
8 looking for nothing to worry about.

9 The second thing you need to think about,
10 about risks -- next page, please -- and that's the
11 stock-bond correlation. And what I mean by that is just
12 the relationship in direction of movement different
13 stocks and bonds. When correlation is positive, stocks
14 move up and bonds move up, they move together.

15 Your portfolio has an explicit assumption that
16 the stock-bond correlation is negative. And by that, I
17 mean that we expect the bonds to be an actual hedge to
18 equities, maybe reduce the risk, reduce the drawdown, to
19 ensure a smoother ride. And why we assume it's
20 negative, quite simply because that's the way it has
21 been for a very long time.

22 So you look at the Chart Number 1, this is for
23 the 21st century since year 2000, and you can see that
24 the correlations, stock-bond correlation was negative
25 all along, except for the recent times. Right now, it's

1 positive. And we talked last quarter about in the last
2 presentation this explicit linkage to inflation. So
3 show inflation on the right-hand side, pre-GFC inflation
4 was little bit high, 3.5 percent. The stock-bond
5 correlation was minus 20 percent. After GFC, or the
6 global financial crisis, inflation moves structurally
7 down 2 percent or below and the stock-bond correlation
8 dip to minus 36 percent. Excellent.

9 Macro moved higher -- I'm sorry, inflation is
10 up, it's averaged about 5.7 percent, and yes, stock-bond
11 correlation positive. What's interesting here, what I
12 want to highlight for this quarter, if you look at this
13 chart on the left, you see the spike, the small spike up
14 at the very right chart, the end of this chart, and the
15 stock-bond correlation stands at 52 percent, which is a
16 very high level.

17 And here, I want to repeat the chart we looked
18 at last time. Go to the next page, please.

19 It's hard to update this chart because, here,
20 it's a long-term perspective from the beginning of the
21 20th century, will take us long time to change that.
22 But the message here is yes, the stock-bond correlation
23 is negative, it has been in the 21st century, but in the
24 century before the stock-bond correlation was positive.
25 So it's not something unusual. 0.5 is really pushing

1 against the upper range of this stock-bond correlation.
2 So it's probably not unreasonably to expect correlations
3 come down. That's probably one of the key risks to your
4 portfolio.

5 And when I say that, look at the next page,
6 there are real consequences to your portfolio from a
7 stock-bond correlation. That's why keeping it false
8 [sic]. So what you see here is the efficient frontier,
9 just a fancy way of saying it's a chart of expected
10 returns versus risks.

11 At the top of this chart is the pure S&P 500.
12 The risk is the (indiscernible) but most risk. And the
13 bottom of this chart is just 5 percent US 10-year
14 Treasury, lowest risk but also lowest return.
15 Everything in between are multi-asset blends, and you
16 can see how this yellow line, which assume the
17 correlation of minus 30 percent, that's very nicely.
18 And this band, which is the most efficient allocation,
19 it's about 70 percent equity, 30 percent fixed income,
20 this is a sweet spot.

21 And this vertical -- I'm sorry, horizontal
22 line, it shows a 7 percent return objective. This is
23 what we're trying to achieve in your portfolio. So the
24 7 percent return objective with the assumption of
25 negative correlation can be achieved at a 5 percent

1 risk. But if stock-bond correlation goes positive, plus
2 30 percent, that's the red line. What you see, that at
3 7 percent return comes with a 7 percent (indiscernible).

4 What are the consequences? A positive
5 stock-bond correlation would require us to think about
6 trade-offs. We can either keep the same level of risk,
7 meaning we're avoiding drawdowns, it's a smoother ride,
8 but the returns will be much lower, or we can solve for
9 the same level of returns, 7 percent, but then we need
10 to increase the equity allocation, meaning the risk will
11 be much higher.

12 So it's something we address through the
13 security (indiscernible) allocation, these natural entry
14 of portfolio, the classic diversified, and that's
15 private assets. So private assets provide a source of
16 uncorrelated returns. We saw through the performance
17 this quarter, public markets as well, private assets
18 less well. This diversification is real but it's
19 important to keep in mind these diversification plays
20 out in a shorter time scale. So it works on a scale of
21 months and quarters.

22 But if you take a step back from like a high
23 vantage point on the perspective of years, three, five
24 years, public markets tend to get more closely aligned.
25 Public and private markets tend to get close aligned.

1 So what can be done?

2 There are certain solutions probably will not
3 be acceptable, such as gold, for example. I'm not
4 advocating for that, it's a classic (indiscernible)
5 stock-bond correlation. Macro catch funds, again, I'm
6 not advocating for them, but it's something that is
7 usually mentioned in this context.

8 The other choice is the trend following
9 strategies, and it's something we discuss, was proposed
10 by Rocaton, and we supported, but for a number of
11 reasons didn't come to be. But again, something that,
12 if this positive stock-bond environment sticks around,
13 something that we may evaluate and reassess. So we do
14 have some options available to us that we can contrast
15 this risk. But again, I just want to highlight it's one
16 of the key risks to your portfolio, and that was the
17 (indiscernible).

18 So what's happening today, this is for more of
19 a hypothetical future, the next page, and again, much
20 like before, we'll talk about risks in the context of
21 the past, how it played out in this quarter, and also in
22 terms of the future. We'll talk about forward looking
23 adjustments.

24 Just to remind you, we talk about risks, we'll
25 frame risks in terms of expected performance. There's a

1 lot of technical jargon, we'll talk about risk
2 management, risk volatility. The way to think about it,
3 it just the expected return at the one-year price.

4 And there are two dimensions of returns.
5 There is total return, which is just what markets give
6 us within strategic asset allocation, and this is
7 captured by the total risk, which is volatility of your
8 portfolio.

9 There is also another dimension, which is the
10 skill of your managers. So it's enormous effort within
11 investment process for investment active managers, both
12 in public markets and private markets, are all active by
13 definition. So active risk is a measure of access. And
14 again, think of it, we show the numbers, so you can see
15 on this table, active risk was 1.9 percent. This is the
16 expected excess return that your managers will deliver.

17 And I'll move fast here because there's really
18 nothing new, and I will say that boring is good, you
19 don't want excitement in the risk presentation. So
20 let's keep it boring. And this page is boring but it's
21 important because your portfolio is complicated. It's
22 \$103 billion of assets, it's over 500 managers. A lot
23 of things happening under the hood. So we can talk for
24 hours and days, but all days will not be
25 (indiscernible).

1 But this is the highest level summary, the
2 statement on your portfolio. I can say it is look
3 boring. It's aligned with markets. And I said that, in
4 Column 1, we show market portfolio, just a simple
5 glance, 60/40, 60 percent of public markets, 40 percent
6 fixed income. And you can see that the risk for this
7 portfolio, 10 percent, total risk, down about 50 basis
8 points, consistent with everything we just talked about.
9 Risk levels come down, risk of market portfolio comes
10 down.

11 Your portfolio benchmark, Column Number 2, the
12 strategic location, it's like a high equity level but
13 this level is coming down versus markets. So, it's
14 9.5 -- I'm sorry, 9.6, and that's a reflection of
15 diversification of asset allocation. It's a positive
16 outcome, again its information via pure, asset
17 allocation is working.

18 And finally, your portfolio, Column Number 3,
19 10.5 percent of total risk, down 40 basis point,
20 consistent with markets, nothing unusual is going on.
21 And within your managers actively is the 1.9 percent,
22 almost unchanged, again, it's consistent with the
23 biggest quarters, and is confirmed by the charts on the
24 right-hand side. Everything is turning down, everything
25 is consistent. Again, this is a very broad measure but

1 it sends you some message of comfort that's a good
2 outcome.

3 So we also want to dive a little bit more into
4 these numbers, starting with the total risk, which is a
5 measure of your total return, the next page, and here
6 again, we show two views of your asset allocation. On
7 the left-hand side, it's your asset allocation, the way
8 we usually think about in terms of market values. This
9 is the last time I have shown with the old asset
10 allocation in 2019, next quarter will be the new asset
11 allocation, which fully implemented it. Hopefully, no
12 surprise, you saw this page many times, and it's about
13 63 percent allocation to equities.

14 The way your portfolio actually performs, the
15 way risks are aligned is captured on the right-hand
16 side, which we call risk allocation, which is the
17 forecast of the total return of your portfolio. And
18 here, you see that the equity exposure is much higher.
19 It's not 63 percent you would expect, but it's actually
20 84 percent, and it simply reflects on the fact that
21 equity is a much risk asset class that comes with high
22 expected return levels, but yes, comes with risk.

23 You can see that the blue band, public equity
24 seemed wider. The black band, which is alternatives, is
25 also wider, will shrink, public fixed income. So no

1 surprises here. And it's important to connect
2 performance with risk because I keep saying risk is
3 performance. So a look, take it together.

4 So next page, thank you, shows the outcome for
5 the quarter, and the way you read this page, the
6 vertical bars show the risk forecasts, the forecast for
7 performance, the triangle shows the realized outcome, so
8 what we expect the realized outcome to be within the
9 forecast, and that tells you that things are as
10 expected. And broadly speaking, yes, things are as
11 expected. Again, it's a good boring, there's nothing
12 wrong with that.

13 Starting with Chart Number 1 in the upper left
14 corner, the first bar labeled TRS, that's your overall
15 portfolio. You can see that the return rate portfolio
16 well captured by the risk forecast. This model works,
17 the performance is expected, nothing unusual is
18 happening.

19 Public equities are the next part, clearly
20 delivered an outstanding performance. We'll look at the
21 breakdown later. Alternatives, I hope nobody is
22 surprised, this was somewhat disappointing quarter. But
23 again, need to be very careful thinking about
24 alternatives on the quarter-by-quarter basis. It sends
25 a very misleading message. We have it here for

1 completeness, but it's obviously a much longer asset
2 class we need to think about on the scale of years,
3 rather than single quarters.

4 But dedicated details starting with public
5 equities, Chart Number 3, again, nothing unusual is
6 going on. We just talked about US markets delivering an
7 outstanding performance of (indiscernible) 2.0. You can
8 see that performance is slightly above the risk
9 forecast, completely consistent with the markets,
10 nothing unusual.

11 In fixed income, Chart Number 2, public fixed
12 income, there's a bit of a push-pull effect. So rates
13 went up by about 70 basis points, which is negative.
14 Spreads went down from about 370 to 340, high yield. So
15 spreads coming down. It's positive for the performance.
16 So you can see core fixed income, negative, high yield
17 positive, while in the forecast. So again, your
18 managers do what they're supposed to do, they capture
19 the market exposure and deal the results, again, say
20 check, check, check.

21 Switching gears to your managers, next page,
22 please. And here, we talk about active risk, which
23 again is a measure of all expected excess returns from
24 the managers. So active risk in your portfolio runs at
25 1.9 percent, and this shows you both the time evolution

1 of your active risk and also the composition. And you
2 can see that this 1.9 percent, the vast majority of it
3 comes from private equity, which is not surprising. We
4 have benchmark private equity to the Russell 3000, at
5 the same time we realize it's not the same market
6 portfolio types of sector composition, market
7 capitalization, the Russell 3000 capture Amazon, we do
8 not hold Amazon private equity. So risk is high. So
9 it's not surprising, which I highlight last quarter, I
10 mentioned again, was a little bit more surprising that
11 the contribution from public equity is fairly low. The
12 contribution of fixed income is also, tends to be on the
13 lower side. It's the subject of ongoing projects within
14 BAM. Work closely with your consultants, with Amanda
15 and Mike.

16 I would say the public equity project is much
17 further developed. At some point, we'll be talking to
18 the Board about it. They are both making progress on
19 the public fixed income side, so it's something to keep
20 in focus and something we'll be discussing with the
21 Board.

22 What does it mean for performance? Go to the
23 next page, please.

24 The same presentation as before. So the
25 vertical box represent the risk forecast, meaning our

1 expectation for their performance. This yellow band
2 will show the realized outcome, and we are looking for
3 the realized outcome to be aligned with the forecast.
4 If it's not, it may be an indication of something
5 unusual in your portfolio, something unusual that your
6 managers do. Of course, internally, we look in much
7 more detail. We look at the manager level. We cannot
8 show these 500 managers here.

9 So again, starting with Chart Number 1, you
10 see the first part labeled TRS, which is your overall
11 portfolio. Everything is within the expectations. It's
12 a high level check. Public equities, as I mentioned
13 before, the risk level is low and the excess return is
14 low as well, but it's well within the range.

15 Alternatives kind of sends a little bit
16 misleading message. Steve talked about it. It's not
17 that private equity performs poorly, private equity
18 performs fine, it's just in public markets
19 (indiscernible) and private market is not keep it up.
20 But again, I would caution against thinking of private
21 equity (indiscernible). So it's always been a much
22 longer asset class.

23 But then, you get to public assets, Chart
24 Number 3 shows public equities. Developed XUS, which is
25 the bar in the middle. So you can see the performance

1 was a little disappointing, and it's actually surprising
2 enough, all of the managers will deliver big, consistent
3 performance. People are the technical -- this is due to
4 (indiscernible) factor. Markets were very strong. They
5 kind of did one wave, and your managers didn't quite
6 catch this wave. But again, longer term, the
7 performance tends to be good.

8 And in the public, the same thing, again the
9 messaging is, the risk level is somewhat muted, which
10 comes with a muted performance, but everything is within
11 the range. It's a check, check, check. Again, it's a
12 good boring. So I'm glad to say there's no excitement
13 here. Yes, no excitement. That's not what you want.

14 So we talked about the last quarter, but of
15 course the most important thing is the future. So the
16 past is down, it's 400 page. We need to work about the
17 next quarter, next year. And the markets are so
18 multinational, I cannot capture everything within the
19 presentation.

20 So here, first of all, we capture the main
21 three dimensions of the world economy and the world
22 markets. That's equities, rates, and commodities, but
23 of course, you have no exposure to commodities. But
24 commodities is everything, all manufacturing, everything
25 provides some commodities to support people.

1 And we use our risk system (indiscernible) to
2 identify what will be the worst possible monthly move
3 for the next year. That's exactly what this chart show
4 you. So the black line shows the history of each
5 market, and then it show the range up for that. And I
6 was not going to read you all these tables, but I want
7 to highlight a couple issues in charts here that kind of
8 indicate a source of potential problem in the future.

9 So first of all, Chart Number 7, bottom left
10 corner, copper. So copper is important because copper
11 goes into anything. So copper is one of the best,
12 leading indicators of the state of economy and the state
13 of manufacturing overall. So copper is closely
14 associated with China, or was in the past, because China
15 is actually manufacturing giant, China is one of the
16 largest consumers of copper, but also with the green
17 (indiscernible). The EVs, electronics require copper.
18 AI cannot work without copper. Copper goes into
19 anything. So anything you -- all the buzzwords you hear
20 down under, they require copper.

21 And the interesting thing about copper, if you
22 compare Chart 7 with Chart 9, Chart 9 is inflation, is a
23 (indiscernible). Copper is the leading indicator of
24 inflation. Copper may spell problems. And if you look
25 at this chart, so when we have produced this chart end

1 of the quarter, copper prices were about 400, and we
2 show that the worst possible outcome is 514. Surprise,
3 surprise, middle May, copper reaches 512, which speaks
4 well for our risk system, we capture the possible
5 outcomes, but it potentially indicates a problem down
6 the line. So copper accelerating so fast may spell out
7 overheating in the marketplace, and it may make the
8 Federal Reserve more reluctant to cut rates.

9 So we saw the ECB, European Central Bank, cut
10 rates, the Bank of Canada cut rates. If you look at
11 these charts, it may create like a longer pause for the
12 Federal Reserve to cut high rates.

13 Why is it important? And we go to the next
14 page. Thank you.

15 So the simple answer is the debt, and we tend
16 to focus on the government debt. There's a lot of talk
17 that US Treasuries now about hundred percent of GDP.
18 It's an important question, cannot go on forever. But
19 personally, I tend to disregard somewhat the level of
20 government debt for very simple reason. We borrowing
21 dollars, we can always manufacture as many dollars as we
22 need. That's not the real problem.

23 The real problem is the private debt. By
24 definition, the private sector cannot manufacture
25 dollars. Private sector is constrained. And the

1 problem is not local. The problem is not just United
2 States, the problem is global. So look at the Chart
3 Number 1 that comes from the IMF. It's a very clear
4 track, the debt level goes higher, higher, higher,
5 globally. Government debt transpires, but also the
6 household debt (indiscernible), is expanding at alarming
7 rate. And the private debt in the corporate sector, at
8 the bottom band, is also growing higher.

9 Why is it important? If you think about the
10 global financial crisis, it started in 2004. In 2004,
11 the Federal Reserve started hiking rates, and took them
12 about three years to get to the point when the two-year
13 was at 4.3 percent. Before the global financial crisis
14 in 2007, the global debt level sat at 193 percent GDP.
15 Almost 200 percent of GDP in that 4.3 percent of yield
16 level.

17 Where we're at, where we're right now, the
18 debt stands at 226 percent of GDP, materially higher.
19 But also the rates are higher as well at 4.6 percent.
20 So this became problem in 2007. I'm not saying that was
21 the only agent for that. That's definitely
22 (indiscernible). The global financial crisis is
23 significantly more complex and complicated. But this
24 level of debt, combined with higher cost of servicing
25 debt, spells troubles, not just in the United States,

1 spells troubles globally.

2 To make it worse, the dollar is
3 extraordinarily strong. The same level of, where dollar
4 stands right now, last time we saw was 1984. That
5 creates problems internationally. So the IMF estimates
6 that 70 countries globally at the risk of default. Just
7 think about it, almost half of the countries globally at
8 the edge of default. There is clearly very strong human
9 angle to that. When a country goes into the default,
10 people suffer. There's also a financial aspect to it.

11 I should have mentioned that (indiscernible)
12 equities and markets are overall.

13 MS. HIRSH: Pause for a second. Kate just
14 texted saying the Zoom froze.

15 MS. SANCHEZ: Yep. Okay, so it's back on. I
16 was just coming to let you know --

17 MR. MEIER: We have had trouble in our
18 building the last two days. Can we start over Ed's
19 presentation?

20 MR. BERMAN: It will go by slower.

21 UNIDENTIFIED SPEAKER: Just say exactly what
22 you said the first time.

23 CHAIR BROWN: I think we're good.

24 MS. SANCHEZ: We're back.

25 MR. BERMAN: Okay. Can we go to the next

1 page, please? The next page?

2 MS. SANCHEZ: Hey, Daniel, I don't -- I'm
3 sorry. Excuse me.

4 Daniel, I don't have camera from the
5 boardroom. I have no video. I can see the screen
6 share, but I can't see the cameras in the boardroom.

7 UNIDENTIFIED SPEAKER: So you can't see it,
8 but it is on here. Let me -- can I rejoin the meeting,
9 Liz?

10 CHAIR BROWN: Almost got the --

11 MS. SANCHEZ: Yeah, I don't see any camera. I
12 have no video.

13 Daniel, we're good. Thank you. Yes, we're
14 good.

15 MR. BERMAN: Can I please have the page
16 before? Thank you.

17 So given all this uncertainty, and the world
18 is always uncertain, so there's nothing new really here,
19 how can it frame your expectations for the future? How
20 will your portfolio perform? So that's captured on this
21 table you see on the screen.

22 So what you see here, the same feedback as we
23 just talked about, equity rates, commodities, and you
24 see the level of shock, which is the projected sale over
25 gain in the market. The important point keep in mind,

1 all these shocks are equally likely. So the way you
2 think about these outcomes, the likelihood of them is
3 exactly the same.

4 So focus on Column Number 1, which is total
5 returns, a few things stand out here. First of all,
6 clearly equities is your biggest risk, and I'm not
7 breaking any new grounds here, we just talked about
8 equity being your largest exposure, and US equities is
9 your largest exposure of them all.

10 Your portfolio is positioned for risk, and why
11 I say that, I look, first of all, at your exposure to
12 inflation, you benefit from an increase in inflation.
13 Exposure to copper, you benefit from increase in copper.
14 Exposure to the dollar, which is Line N 6, you benefit
15 from a selloff in dollar, which is usually associated
16 with a cyclical exposure, and you also benefit from the
17 cut in the interest rate, which is Line 4 and Line 5,
18 which altogether tells me that you control is
19 (indiscernible) risk, meaning performance in the
20 expanded market. It will not do so well when markets go
21 down.

22 The other thing that stands out for me from
23 Column Number 1 is what we call convexity. And what I
24 mean by this is asymmetry of returns. So you'll notice
25 that your portfolio, from data, if the risk is on, then

1 the risk gone, and that's exactly what we want. We want
2 the selloffs to be less pronounced and the gains to be
3 stronger. This is the result of the asset allocation.
4 It's exactly what we want. It's an affirmation, it's a
5 good outcome.

6 The second thing I want to mention on your
7 excess returns, which is Column Number 2, which comes
8 through the skill of your managers, and that you see the
9 same convexity or asymmetry of returns. The returns are
10 high on the way up and the loss on the way down. It's
11 good, it's a good outcome. But you also see that the
12 risk on, meaning markets rally, your returns are
13 positive. When the risk off, the returns are negative.

14 So your expectation is that your portfolio
15 will outperform the benchmark in the rallying markets
16 and they also underperform when the market sell off. So
17 this just broad outcome of the analysis, and it's good
18 intuition to keep in mind when we think about markets
19 and markets always go up and down.

20 So I'll pause there, if there are any
21 questions.

22 MR. MEIER: And maybe just one other comment,
23 we're going into an election year as well. We're in an
24 election year, so there may be some volatility
25 associated with either consistent regime or a change in

1 administration here in the States.

2 CHAIR BROWN: Anthony had a question.

3 MR. GIORDANO: Yeah. I (indiscernible) your
4 presentation, so I caught something about 10 minutes ago
5 that I wanted to grab onto.

6 You said you had the toolkit for mitigating
7 the risk and there was various things that we could
8 utilize, including commodities, but it was the
9 correlation of stock to bonds that was the potential
10 risk? I just wanted to --

11 MR. BERMAN: Yes, the main is the stock-bond
12 correlation, meaning if stocks and bonds move together,
13 or the opposite of each other, the implicit assumption
14 in your portfolio that they move in the opposite
15 direction, meaning negative stock-bond correlation,
16 which hasn't been the case for the past several
17 quarters.

18 We expect it to normalize all the time, as
19 inflation comes down. What may prevent it from
20 normalizing, obviously the inflation, but also the
21 uncertainty. So stock-bond correlation, not just by the
22 level of inflation but by the uncertainty about the
23 level of GDP growth and inflation outlook.

24 So the issue is a bit more complicated and it
25 certainly may come from geopolitical. Steve just

1 mentioned elections. Absolutely. There's several wars
2 happening in the world. Everything is good right now.
3 Unfortunately, history tells us good times never last.
4 So we keeping in focus, and something we will bring to
5 the Board.

6 Commodities will not necessarily be a good
7 (indiscernible) of the stock-bond correlation, all
8 risks, I'm not advocating, (indiscernible) means other
9 issues, but it's something connection. In lieu of the
10 (indiscernible) one of the best ways to address that,
11 something we talked about.

12 MR. MEIER: I also think the fact that we have
13 had a painful few years as a bond investor, as rates
14 have normalized, we came off of artificially low rates
15 that have been pushed down following the global
16 financial crisis, and then again after the pandemic, you
17 know, 10-year Treasury, 70 basis points, that's not
18 really sustainable. So I think we're at a healthier
19 level, although it's been painful to get there.

20 I think you'll have the base rates, the higher
21 base rates will help support and power the yield --

22 MR. GIORDANO: That should continue. We have
23 the toolkit, essentially, to mitigate. Is that the
24 thesis?

25 MR. MEIER: Well, we're long only investors.

1 The hope and expectation is, again, Ed talks about that
2 correlation normalizing, that's the normal situation
3 where they don't necessarily move in sync, right? So
4 one is down, one is up, and it's a little more stable.

5 MR. GIORDANO: (Indiscernible) to do with
6 that.

7 MR. MEIER: No, but again, Ed talked about
8 inflation, but it's also just the low level of rates
9 after that 35 year secular decline in rates, got to a
10 point where it was just extreme.

11 MR. GIORDANO: Yeah, and I think you touched
12 on a point that I smell coming. I think the next bubble
13 to burst is on the low end of the private credit
14 spectrum. I get calls, I get five calls a day asking
15 for, you know, offering me money on private credit,
16 basically just some signature of money, and there's
17 going to be a ton of defaults, I think at some point,
18 not at the high end, not where we are dealing with our
19 part, but at the low end where there's business to
20 business lows.

21 MR. MEIER: There's a lot of new players.

22 MR. GIORDANO: It's the new chop shop, it
23 really is, and I see it coming. I'm trying to figure
24 out how to position myself personally, but it's going to
25 be a bigger issue overall.

1 MR. BERMAN: It could be, and there's a lot of
2 concern about private credit, but they just one of the
3 concerns. I guarantee you there will be a crisis. I
4 guarantee there will be a recession. I have no idea
5 when, but we will be (indiscernible) ahead of us.

6 MR. MEIER: But actually, Tony, to your point,
7 which is a very good one, is the old kill advisors, the
8 Ares, the Apollos that you have invested with in private
9 credit, they're extraordinary managers with great
10 insights into the markets. A lot of those are
11 multi-strategies as well, so they can kind of move in
12 and out of where they think the opportunities are, and
13 2030-plus year of track records.

14 MR. GIORDANO: Agreed.

15 CHAIR BROWN: Thank you. Well done, Ed,
16 appreciate it.

17 Any questions or concerns?

18 Oh, I'm sorry. Ephy, are you sitting at the
19 table?

20 (Crosstalk.)

21 CHAIR BROWN: I don't think so. It's all --
22 to ask a question if he's not sitting at the table?

23 MS. BUDZIK: We usually have one
24 representative from --

25 CHAIR BROWN: Tony, do you want to switch?

1 No, maybe you want to tell him -- why don't you tell him
2 your question? Because that's against the rules.

3 MR. GIORDANO: It's a question regarding how
4 the models are created and how -- are they static? Have
5 they (indiscernible) under the same tables before. I
6 guess the question is generally, how are the models
7 created and how are they kind of fixed in real time, or
8 are they fixed in real time?

9 MR. BERMAN: No, the models are not fixed in
10 real time. So we use Borrow One (phonetic), which is
11 considered the leading provider of -- leading vendor of
12 risk technology. So the models so-called factor-based
13 and the model identifies the fundamental factors driving
14 the markets. It's used about four-and-a-half-thousand
15 different factors globally, and the factors can be, for
16 example, equities, will be value momentum, growth,
17 country exposure, and the model maps the entire, all
18 global markets to sort of four-and-a-half-thousand
19 factors. These factors updated daily, and it's a fairly
20 sophisticated model to make sure that the factors are
21 aligned was the correlation. So it's a big machinery.

22 Borrow One is part of MSCL. It's one of the
23 largest corporations in the world, part of S&P 500. And
24 one or two of them is comparable to MSCI, but nobody is
25 (indiscernible), still a sophisticated model. We can

1 talk more about it. I think we both (indiscernible).

2 So we can do it on the side.

3 CHAIR BROWN: Great. Thank you. Any
4 questions?

5 Thank you, Ed, much appreciated.

6 MR. BERMAN: Thank you.

7 CHAIR BROWN: Any questions before we go into
8 Executive Session? Great.

9 I think this is about to move in to Executive
10 Session. Do I hear a motion moved?

11 MS. LEE: So moved.

12 CHAIR BROWN: It has been moved. Is there a
13 second?

14 MS. HIRSH: Second.

15 CHAIR BROWN: Thank you. Any questions,
16 comments? All those in favor of going into Executive
17 Session, please say aye.

18 (Ayes were heard.)

19 CHAIR BROWN: Those opposed, say nay? Any
20 abstentions? We are now in Executive Session.

21 (Exit Public Session; enter Executive
22 Session.)

23 (Exit Executive Session; enter Public
24 Session.)

25 CHAIR BROWN: So at this time, we're back into

1 Public Session, for the record. And now, we will have a
2 readout from Ron Swingle.

3 MR. SWINGLE: Thank you. In Executive
4 Session, of the Passport Funds, we provided a list of
5 contracts up for renewal.

6 In Executive Session of the Pension Fund, we
7 received preliminary performance data, we received one
8 manager update, and we received a private equity
9 presentation in which consensus was reached.

10 CHAIR BROWN: Thank you.

11 I think we have concluded our business for
12 today. Any questions or comments before we adjourn?

13 Great. Is there a motion to adjourn?

14 MS. MCGRATH: So moved.

15 CHAIR BROWN: Thank you. Is there a second?

16 MS. LEE: Second.

17 CHAIR BROWN: Great. All those in favor to
18 adjourn, please say aye.

19 (Ayes were heard.)

20 CHAIR BROWN: Those opposed, say nay?
21 Abstentions? We are adjourned. Thank you for coming,
22 everybody.

23 (The proceedings concluded at 12:26 p.m.)

24

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