```
0001
     TEACHERS' RETIREMENT SYSTEM OF THE CITY OF NEW YORK
 2
 3
                      INVESTMENT MEETING
 4
 5
                       PUBLIC SESSION
 6
 7
                      December 7, 2023
 8
                          10:12 a.m.
 9
10
                      Remote Proceeding
11
                   New York, New York 10041
12
13
14
15
16
17
18
19
20
21
22
23
                       Sophian DeFrance
                       Digital Reporter
24
             Notary Commission No. 01DE0006274
25
0002
 1
                           APPEARANCES:
     PATRICIA REILLY, TRS EXECUTIVE DIRECTOR
    THAD MCTIGUE, TRS DEPUTY EXECUTIVE DIRECTOR
    THOMAS BROWN, CHAIR, TRUSTEE
    ALISON HIRSH, OFFICE OF THE COMPTROLLER, TRUSTEE
    KEVIN LIU, MAYOR'S OFFICE, TRUSTEE
 7
    DAVID KAZANSKY, TRUSTEE
   VICTORIA LEE, TRUSTEE
 9
   Also Present:
10
   LIZ SANCHEZ, EXECUTIVE ASSISTANT
   MAREK TYSZKIEWICZ, CHIEF ACTUARY
11
    PRISCILLA BAILEY, TRS
   MICHAEL FLUVIO, ROCATON/GOLDMAN SACHS
13
14
    AMANDA JANUSZ, ROCATON/GOLDMAN SACHS
   STEVE MEIER, BUREAU OF ASSET MANAGEMENT
15
16 RON SWINGLE, TRS
17
    EPHRAIM ZAKRY, TRS
    VALERIE BUDZIK, TRS
18
19
   ENEASZ KADZIELA, CHIEF ACTUARY
20
   MARC RIVITZ, STEPSTONE
21
    SEAN BARBER, HAMILTON LANE
22
    PETYA NIKOLOVA, BUREAU OF ASSET MANAGEMENT
23 MICHAEL DORRELL, STONEPEAK INFRASTRUCTURE PARTNERS
24 BLAIR BARBERINO, BUREAU OF ASSET MANAGEMENT
25
   YING LIN, STEPSTONE
0003
```

```
WILFREDO SUAREZ, TRS
    KATE VISCONTI, TRS
 3
    SANYA COWAN, BUREAU OF ASSET MANAGEMENT
    ARVISTEA AFTOUSMI
 5
    KOMIL ATAEV
 6
    JACKIE YE
 7
    PRISCILLA BAILEY, TRS
     JOHN GLUSZAK, OFFICE OF THE COMPTROLLER
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
0004
1
               (The proceedings commenced at 10:12 a.m.)
 2
               CHAIRMAN BROWN: Today is November 7th, 2023.
    I'll start by calling the roll.
 3
 4
               Kevin Liu?
 5
               MR. LIU: Present, representing Mayor Adams.
 6
              MS. REILLY: Thomas Brown.
 7
               CHAIRMAN BROWN: Present, Patricia. Good
 8
    morning.
 9
               MS. REILLY: Good morning.
10
               Gregory Faulkner or Anthony Giordano?
11
               Alison Hirsh?
12
              MS. HIRSH: Present, representing Comptroller
13
    Brad Lander.
14
              MS. REILLY: David Kazansky?
15
              MR. KAZANSKY: Present.
16
              MS. REILLY: Victoria Lee?
17
              MS. LEE: Present.
18
              MS. REILLY: We have a quorum. I'll turn it
19
    over to the Chair.
20
               CHAIRMAN BROWN: Great, thank you.
21
               Good morning, everybody. Good morning. I
22
     guess we'll start off with the Passport Funds Third
23
     Quarter 2023 Performance Review by Rocaton.
24
              MR. FULVIO: Great. I'm going to attempt to
25
    share my screen. As I'm pulling that up, but for anyone
0005
 1
     following along in the material, I'm going to ask you to
     flip ahead to Slide 26.
```

So I think, as everyone will recall from last meeting, we did discuss what was more challenged quarter from a market performance standpoint during the third quarter, and what we did want to just very briefly recap were the returns for the Passport Funds during that time period, which I now have up on the screen. So you can see that, for the quarter, markets sold off a little over 3 percent here in the US and abroad, equity markets that is, and the Diversified Equity Fund was also down about 3-and-a-half percent.

But what we also saw with the strong market environment coming into the first half of this year, fairly strong, still, year-to-date returns for the calendar year-to-date time period through September. So the Diversified Equity Fund up over 10 percent.

And then if you look over the trailing 12-month period, again, with that strong market rebound coming out of the COVID period, markets up over 20 percent, with some value-add over the trailing one and three-year time period for the Diversified Equity Fund. You can see a lot of that contribution is coming, as you would expect, from the active manager component of the US equity composite as well as the international equity

composite. Over the trailing three years, about 1 percent outperformance from the active manager composite and about 60 basis points of net outperformance for the international composite. So I think, after a number of changes made to that fund, or within that fund, a few years ago, we're starting to see the benefits of those changes play out in the relative performance.

For the Balanced Fund, again, a down quarter but fairly strong returns, fairly strong for that fund, when we look to the year-to-date. Up nearly 4 percent, and on trailing one-year and three-year time periods, up over 7 percent and 1 percent respectively.

The International Equity Fund down about 4.7 percent for the third quarter. Again, very strong long-term returns with international markets also up over 29 percent, this fund was up over 22 percent, so we will definitely take that.

The Sustainable Equity Fund, following growth stocks, which are down about 3 percent during the month, you can see that fund is down about 2-and-a-half percent, so it's relative outperformance there. Longer term, a little bit more underperformance for that one-year time period, and up over 7 percent over three years.

25 And then for the Index Funds, as you'd expect, 0007

those funds track their benchmarks very closely.

So we just wanted to recap that for everyone.

3 Would you like us to move to October?

4 CHAIRMAN BROWN: Any questions, first, for

Mike or Amanda? Great. We can move to the Passport 5 6 Funds for October of 2023 Performance Review. Good 7 month, right? Oh no --8 MS. JANUSZ: You've got to wait for November, 9 better numbers, yeah. 10 CHAIRMAN BROWN: Wait a whole month. 11 MS. JANUSZ: So the month of October, 12 unfortunately, was negative pretty much across the 13 board. Within equities, we saw US equities faring a 14 little bit better than non-US, and certainly better than 15 emerging markets, which were the more challenged area of 16 the equity markets. More defensive areas like utilities fared better than energy, which was one of the worst 17 18 performing sectors for the month of October. 19 On the fixed income side of things, we have 20 seen most of the major central banks at or near peak --21 peak rates and only likely to raise further if we see a 22 surprise on the upside in terms of either growth or 23 inflation numbers. 24 We also saw Treasury yields continuing to 25 rise. The 10-year popped up above 5 percent for the 0008 1 first time since 2007, during the month of October. 2 In terms of the Passport Funds, the 3 Diversified Equity Fund, which does have over \$15 billion in assets, had a return of negative 3 percent 5 for the month of October, and within that, the passive US equity at negative 2.6 percent was the best performing segment of the Diversified Equity Fund, with 7 8 the active and international composites down around 9 3-and-a-half and negative 4 percent for the month. 10 The Balanced Fund was your best performing option for the market. It is more conservatively 11 12 allocated, which was down around 1 percent for the month 13 of October. 14 And that International Equity Fund, as we 15 talked about, was the more challenged area of the -- of 16 the equity markets during October, down a little over 4 17 percent and trailing that benchmark by just around 15 18 basis points. 19 The Sustainable Equity Fund is a growth oriented fund, did trail a little bit versus its 20 21 benchmark for the month. Given some of that growth 22 orientation, we have continued to see very style driven 23 markets either in favor of growth or value throughout 24 2023, and so that fund was a little bit challenged 25 relative to the benchmark, based on style. 0009 1 The Passive Funds at the bottom of the page 2 are tracking their benchmarks, as we would expect. A 3 little bit of tracking here for the International Fund,

partly due to timing of cash flows.

I'll pause there to see if there's any questions on October results.

5

```
7
               CHAIRMAN BROWN: Any questions for Amanda?
               Thank you, Amanda.
 9
               Now we move to November -- the highlight.
10
               (Crosstalk.)
11
               MR. FULVIO: I think I heard November
12
     described as quite a year for the market. So we'll take
13
     what we can get, and all the unfortunate numbers we
14
     looked at for the third quarter, from a negative
15
     perspective, were completely reversed in the month of
16
    November. So the equity markets in the US were over 9
17
    percent. I think what I heard was that might have been
18
     the third strongest month for equity markets in the US
19
     since the global financial crisis.
20
               We saw the 10-year Treasury field move down by
21
     about 60 basis points in the month. That was the
22
     largest monthly move since July 2021, and in all
23
     (indiscernible), we have continued to see a lot of
24
     volatility in Treasury yields this year, so it was a
25
     fairly impressive month across markets.
0010
 1
               You can see on this page, if you look down the
 2
     page for the month, very strong. I noted the 9 percent
 3
     return for US equity markets, non-US equity markets also
     did quite well. Emerging markets standing out as maybe,
 5
     I'll say the laggard, still up 8 percent for the month.
     So it was very strong across the board.
 7
               If you're looking at the global market
     composite at the top of the page for the Diversified
 9
     Equity Fund, you can see that benchmark was up about 9.3
10
     percent for the month. That brought the fiscal year
11
     return back to positive, right around 2-and-a-half
12
     percent, calendar year to date, that benchmark is up
     over 17 percent. So we will -- we will take the
13
14
     exuberance that came with comments from the FO -- some
     FOMC members around the moderation in inflation that
15
16
     they're seeing, moderation in wage growth as well.
17
               CHAIRMAN BROWN: I'm sorry, you said the
18
     year-to-date or fiscal year-to-date was 1.2?
19
               MR. FULVIO: 2.5 percent.
20
                           2.5.
               MS. REILLY:
21
               MR. FULVIO: For the Diversified Equity Funds
22
    benchmark.
23
               CHAIRMAN BROWN:
                                And the year-to-date?
24
               MR. FULVIO: Calendar year-to-date. 17.3
25
    percent.
0011
 1
               CHAIRMAN BROWN:
                                Thank you.
               MR. FULVIO: And again, I think a lot of the
 2
 3
    market performance we saw, really being driven by the
    comments we heard from the Fed, acknowledging
    moderation, legislation, wage growth, all of that
    leading to investors being a little bit more exuberant
 7
     around the potential for interest rate cuts in 2024.
               The market, I think last I saw this week, this
```

```
pricing cuts as early as second quarter may. Yeah,
10
     we're saying probably later in the year, in terms of our
     outlook. We also do think there is still, albeit
11
12
    modest, but still a chance of recession, if you look out
13
     over the next year.
14
               But again, probably still shallow, if that,
15
    but that again is really centered around the possibility
16
     for shocks related to if we do see, you know, kind of
17
    reversals in inflation, that would probably cause the
18
     Fed to maybe not cut rates at this point. It doesn't
19
    feel like there's a likelihood that they'll increase
20
    rates, but if we start to see some of the numbers which
21
     can drive a very data dependent Fed at this point change
22
     the story, we could see a little bit more stress. We
23
     are seeing earnings slowing a little bit as well.
24
     something else we're thinking about looking out into
25
     2024. I'm sure Steve has comments that he'll make as
0012
 1
    well, so I don't want to belabor it, but it was a good
 2
    month, and we'll take it.
 3
               And so far, December is off to a more kind of
 4
    flat look for equity, which you know, five days. Yeah,
 5
     I don't even want to make annual predictions, let
     alone -- let alone monthly.
 7
               CHAIRMAN BROWN: Great, thank you, Mike.
 8
               Any questions for Rocaton, Michael or Amanda?
 9
     Great.
10
               Let record show that we have Ephry Zakry who
11
     just joined us. Thank you. Welcome, Ephry.
12
               MR. ZAKRY: Thank you. Good morning.
13
               CHAIRMAN BROWN: Good morning. So we move on
     to the Pension Fund Performance Update Quarterly
14
15
     Presentation. Steve --
16
               MR. MEIER: Terrific.
17
               CHAIRMAN BROWN: -- take that one?
18
               MR. MEIER: Yes.
19
               CHAIRMAN BROWN:
                               Thank you.
20
               MR. MEIER: Thank you, Mr. Chair.
21
               So I have been a little under the weather
     lately, but I feel on top of my game today, and I told
23
     Kate to try to keep up, so it says 30 minutes for the
24
     update. It won't be 30 minutes, but there is a lot to
25
     talk about.
0013
 1
               UNIDENTIFIED SPEAKER: An hour-and-a-half.
 2
               MR. MEIER: It'll feel like an
     hour-and-a-half, it'll be 15 minutes.
 3
               Kate, go to the first slide, please.
 5
               Obviously, everyone has been focused, laser
 6
     focus, on inflation in the last year-and-a-half. US and
 7
     global inflation rates have obviously declined. This
 8
     decline has caused markets to price in or assume that
 9
     rate hikes are done. That's both here and abroad. And
10
    bond prices have significantly rallied more recently, as
```

Mike and Amanda talked about, and yields have come down commensurately, and I'll talk a little bit more about where we are today from a rate environment.

On the next slide, inflation, you can see as a reminder, CPI in white actually peaked at 9.1 percent in June of 2022. It's now at about 3-and-a-quarter percent, so it's really come down significantly. Core PCE deflated has been a little more sticky in the mid 3s, but expectations are for them to continue to move lower.

On the next slide, actually the European Union surprisingly on the downside with inflation. Their most recent chart showed inflation coming in around 2-and-a-half percent, which is below the estimate of 3.8 percent, so some good news there. But again, a general

decline in inflation levels around the world.

I should also say that this has been a really unusual time. A lot of people look back at history and say, where are we in the market cycle? Market cycle analysis kind of goes out the window because we're coming off of a pandemic, which is a very unusual time, and I think that is evidence of where we are.

On the next slide, from an employment standpoint, employment growth has slowed in line with Fed expectations recently here in the states. If you remember, last year, we had growth in employment of, you know, close to 300,000 jobs per month. It's actually slowed nicely now in the last month in October came in at around 150,000 jobs created. The unemployment rate in the States is 3.9 percent, still below 4 percent, which is quite remarkable, given the amount of tightening we have seen. And this week, tomorrow, we actually have a non-form payroll report (phonetic) for November and the market consensus is for 180,000 jobs created. Some of that has to do with the strike and the settlement of the strike, which is higher than we saw in October, but again, expecting 3.9 percent --

UNIDENTIFIED SPEAKER: Tomorrow?

MR. MEIER: Tomorrow, yeah, at 8:30 in the morning, yeah. We'll be watching.

On the next slide is, again, sort of representation, where we are. Came down a little bit in terms of a labor force participation rate. We're still not where we were pre-pandemic, but again, it's a good story all around, and again, slowing commensurately with Fed expectations that should hopefully keep them on pause from rate hike cycles.

On the next slide, a quick look at where we are, where we have come, and what the expectations are. The consensus forecasts are for us to continue to see a decline in employment growth in the States. Again, inflate -- the interest rate hikes that operate with a

long and variable lag, and that is expected to be reflected in the coming months, as the employment rate slows down.

Next slide, US economic growth. Third quarter US economic growth was actually fairly robust, came in close to 5 percent, actually was forecasted to come in as high as 5.8 percent by the Atlanta Fed, so those are really remarkable numbers, and the US is outperforming expectations for growth relative to China.

On the next slide, a look at where we are, and you can see on the far right-hand side where the green line, which is China, and the red line, which is US, touch and converge around 5 percent. Growth has

actually been really challenging in China. I'll talk a little bit more about that in a moment, but it's been really quite robust in the States, again. Perhaps, potentially -- specifically given where we are in the hiking cycle.

On the next slide, as Mike and Amanda talked about, a lot of this has to do with interest rates. So the US, the UK, the ECB, and Japan, and I'll qualify that in a moment, rates have all been on hold recently. Expectations are for the next move to potentially be lower, as Mike said. I believe there's an 83 percent chance for cutting price in for May. I agree with Mike. I do think that's premature.

And the expectations are that perhaps you'll see the ECB cut rates even earlier and the market starting to price and decline. There are five rate cuts in 2024 to begin in April. Again, I think that's probably perhaps too optimistic.

There was news overnight about Japan. So Japan is still the one holdout where they continue to have negative official rates. The next slide, you can see that on the bottom. They still have negative 10 basis points, official rates, but there was some commentary overnight that they may actually adjust their rate policy when they meet on the 18th and 19th of this

month.

The Fed meets next Wednesday, and the expectation is for no change in interest rates, but you can see where we have got the Federal Reserve, the Bank of England, and ECV. Again, the staircases on the far right show those rate hikes that we have had since, really, March of 2022, and Japan has been kind of an outlier, but they have made some tweaks to their yield curve control, and again, perhaps they will raise rates at some point later this month.

On the next slide, just a look at where we were in November. November, bond prices increases, increase in yields came down significantly. We saw significant retail flows into corporate debt, both high

yield and investment grade, driving spreads lower. I'll show you a slide on that in a moment. And we have had huge flows in investor interest in private credit, which I think is certainly consistent with our view in terms of the value that private credit options present these days.

Can you skip the next slide, Kate, and go right to the US Treasury yield history.

You can see where we are, far right-hand side and white, 478 is where we were on November 27th on two-year yields. As of last night, they were actually,

twos were at 460. And in green, we see the 10-year yields at 435. They actually touched 410 yesterday. Again, Mike talked about 60 basis points decline through November, which is correct, but where we are now is they're at almost fully 90 percent and the peak is slightly over 5 percent, earlier this year. So a huge decline in a lot of volatility in bond prices and yields.

On the next slide, a quick look at spreads. On the top, you can see high yield spreads, and then white below that, investment grade spreads. They're both trading below their median, which represents perhaps a less compelling argument to reallocate money into those areas right now. Again, we continue to expect volatility around those spreads. But a lot of that has to do with retail flows into investment grade and non-investment grade product, as well as typical insurance company inflows into the sector.

On the next slide, recently, both stocks and bonds have rallied, which you heard that recurring theme, and Mike had the privilege of going through November. For November, the public market 60/40 split, the portfolio actually achieved a 7.6 percent return, and to echo Mike's comment, you know, it's a great year in one month, great returns for the year in one month.

But over the last year, for the full year 2023, the 60/40 portfolios generated a return of 11 percent, which is significant.

On the next slide, not to beat a dead horse here, but yeah, obviously, third quarter returns in public sectors were challenged. I like to highlight high yield, which has half the duration exposure of investment grade corporates and wider credit spread, so there's more carry, more coupon, and you can see that reflected in the fact that there was a positive, albeit a small positive, performance for a challenging quarter.

And the next slide, a look at world equity markets. The Russell 3000 year-to-date has delivered almost 18 percent returns, 17.7 percent, but you can see all manner of index on the upper side. Dow is up 7 percent S&P 500 up 18, almost 19 percent, and NASDAQ

fully 36 percent. I'll comment a little bit more on 17 18 that in a moment.

European -- European stocks have actually performed very, very strongly coming off of a challenging 2022, as well, year-to-date. Asia has been a little more challenged, particularly given the weakness we have seen in China, but we should note that Japan is a little bit of an outlier in terms of their significant outperformance of 28 percent up 0020

year-to-date.

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

0021 1

2

3

5

6

7

8

9

10

11

12

13

14

15

17

18

The bottom, on the last line, and the bottom of the 41, that's the Bloomberg World Index. That comprises fully 85 percent of the market capitalization around the world, and that's up 14 percent year-to-date.

On the next slide, world bond markets, sovereign yields in the US and Asia are higher. You can see that on the far right-hand side. US, at the time of the snapshot, we had a 434 10-year yield. It started the year at 3.88 percent. That's to say you're up 486 basis points for the year.

Europe has seen more of a rally. Again, it has to do more with the sluggishness of economic growth there. And Japan and Asia, we have seen higher yields associated with growth in those markets, not withstanding the fact that China, on the very, very bottom, has seen a contraction in sovereign 10-year yields.

If you skip ahead to recent news, Kate? A couple of things I talked about in China, Chinese economy. It has been very challenged, particularly by the property market there. The shadow banking system, I don't know if you read the Wall Street Journal, there was an article yesterday that it is significantly struggling with off balance sheets or

non-bank debt of anywhere between 7 and \$11 trillion. Again, a lot of that's tied to the property market. Moody's actually placed China on negative credit watch on Tuesday, and the expectation being that the banks will likely -- sorry, the Chinese government will likely step in to provide some level of support for government, local government debt that's been issued and the number is in the trillions.

A couple other things of note. Sam Bankman Fried is heading the prison, who is the former grandchild behind FX Connect. Sorry about that. the former chairman, CEO of finance.

And lastly, we have seen some disruption in OpenAI. I don't know if you followed the shenanigans in the boardroom last week, or the drama, but Sam Altman 16 had left. He was going to Microsoft, and came back. They restructured the board where they put, actually --Larry Summers is actually now one of the new board

members, which I think is remarkable, and in a positive way.

And vesterday, Elon Musk announced the fact

And yesterday, Elon Musk announced the fact that he was coming out with his own AI solution. A lot of people don't remember or realize, OpenAI was actually initially co-founded by Elon Musk with a billion dollar commitment of his own money, and there's a lot of

movement there in terms of what they're doing at SpaceX, automated cars, Tesla and New Orleans --

CHAIRMAN BROWN: He's been quiet.

MR. MEIER: Yeah.

CHAIRMAN BROWN: I just finished his book, obviously, so you just got the snapshot.

MR. MEIER: Which, frankly, I don't think I'd ever read a history book about someone that's 10 years younger than I am, still alive, but Walter Isaacson is one of my favorite author, and it's just a really interesting book in terms of -- I'm not a big Elon Musk fan, but it was a worthwhile read.

On the next slide, food for thought, and I actually love this segment, and you can see over the course of time where we have actually seen asset class bubbles develop starting with gold back in the 1970s. I had to get on ChatGPT this morning and figure out what was the peak of gold, back in the '70s, which was \$850 a Troy ounce. It's over almost \$2,000 a Troy ounce now.

A huge runup in Japanese stocks. I remember they peaked in 1989. The Russian Finon as well after the Cold War, where those prices ran up and it came straight back down. The tech bubble we saw in 1998, '99, which crashed 2000, 2001. Obviously, very challenging time there, but that market recovered, and

the internet is the real thing. And you can look all the way to the far right-hand side where it actually has AI. I still think AI is very much a transformational technology that we all should keep our eyes on, but prices have really kind of run up in certain of those stocks, and I'll touch on that.

Actually the next slide, Kate?

The next slide actually distinguishes the S&P 500 returns relative to -- well, the top seven stocks relative to the other 493. This is referred to as the magnificent seven, which has really dominated S&P 500 performance with average returns of slightly over 80 percent year-to-date, which is really extraordinary.

And for those, just as a reminder, those stocks, those seven stocks are Apple, Microsoft, NVIDIA, which is the chip maker behind AI, Amazon, Meta or formerly known as Facebook, Tesla and Alphabet or Google. So interesting.

UNIDENTIFIED SPEAKER: Tesla?

20 MR. MEIER: Yeah. More food for thought on

the next slide, perhaps a little more negative. The default cycle has started. You can see on the far right-hand side where default rates have kind of moved up in terms of loans and high yield bonds. They're not at extraordinary levels, but they are inching higher.

On the next slide, we also see credit card delinquency rates are rising, and the cohorts there by age group, groups, as people have kind spent through their COVID dollars and starting to put more on their credit cards. These are serious delinquencies that are beyond 90 days.

Similar story in the next slide regarding car loans. Serious delinquencies, again, are edging higher, so not all is well in the economy, and that's another reason why we expect to see low slow earnings perhaps be a little more challenged in the first part of next year.

On the next slide, also rapid decline in bank lending. You can see on the far right-hand side, bank lending is now contracted. A lot of this has to do with the regional bank challenges we saw in March, April and May, and the pullback associated with protection of balance sheets and less of an ability or willingness to lend on the part of regional banks. This rapid decline in bank lending will constrain US economy growth. Again, another reason why we expect the economy to slow, and at some point, the Fed to start reducing rates. Probably in the second half, Mike, of 2024?

I'd say the other thing meaningful about this slide is that non-bank lenders have stepped in and sort of being much more relevant in terms of filling that gap

of lending, as the banks have pulled back.

On the next slide, and I have done a little homework, I found this interesting, this is the growth of public markets and private markets over the past decade. The global fixed income market outstanding today is about 136 trillion, 42 trillion of that has grown, issuance has grown over the last 10 years. That's about a 44 percent increase. Public equities, about \$110 trillion of outstandings, which is up about 46 percent from where it was 10 years ago. I don't have good data on the banking sector, I'm afraid, but more importantly, I think, for me, on the far right-hand side, you can see that there's been additional \$8 trillion in growth about standings in the private capital markets, and that's up -- that's now about 40 trillion-plus outstanding, which is about a 25 percent increase. So I still think it's very prudent to continue reallocating money from public markets in privates.

Next slide. This is really interesting to me because it started to be more of an awareness. The market was very focused on macro trends in the economy $\frac{1}{2}$

and the Fed policy. There was a little bit of a pivot in October, when bonds pulled off really quite significantly before the rally in November. It had more

to do with fiscal concerns and the amount of debt that we're issuing. And I have said, I think at prior meetings, that we have saw -- we're expecting to see an average option for US Treasury debt to increase 24 percent in 2024 loans. So the question is, who will the marginal buyers be?

And what this slide indicates is that perhaps it will not be China, it likely won't be Japan either, given the currency hedge, the cost of the currency hedge, but again, this reflects, since 2021, a \$300 billion reduction in terms of holdings by Chinese entities. So again, some concerns about market technicals as issuance goes up and perhaps demand is weakened by central banks abroad, but again, more eyes will be, I believe, on fiscal as well as macro concerns in the future.

And I think the last thought I have in terms of food for thought, and again, not to beat a dead horse here, but it gets back to China and the Chinese consumer confidence being -- next slide, Kate, please. Thanks, Kate.

On the far right-hand side, you can see that consumer confidence has really plunged recently in China, as they have come out of COVID. It hasn't been as robust a recovery as it would have been expected.

This is constraining growth in the world's second largest economy. Again, it's hard to draw a parallel between the Chinese economy and the US, the US being larger, is a more developed economy. The average earnings in the US, I believe it's about \$76,000 per annum per household, versus in China, it's around 13,000. So kind of an apples to orange comparison, but China is an engine for growth for the global economy, and the fact that it is weakened and not performing to expectation has implications for global growth.

MR. FULVIO: We have seen this, too. We've been looking at household deposits, so customers, the money they're holding in their savings accounts within China has been -- the trend has been significantly increasing in recent years, indicating low consumer confidence in China as well.

(Crosstalk.)

CHAIRMAN BROWN: Is going up?

MR. FULVIO: They're keeping more money in the bank.

MR. MEIER: There was an article in the
Journal today that actually talked about they're putting
it into one of the non-bank, the shadow banking entities
that somehow have attractive return streams that are

```
25
     tied to the property market. There's been two defaults
0028
 1
    in the last two months in China, which is something that
 2
     the Chinese government are very concerned about, because
 3
     the shadow banking system in China is just enormous and
     it's unregulated, and I even saw in the article the
 5
    words "Lehman moment" came up, so. I don't -- I
     wouldn't be that dramatic, but it is something that
 7
     there's --
               CHAIRMAN BROWN: Steve, I'm sorry, did you say
 9
     the average salary in the United States was $76,000?
10
               MR. MEIER: Yeah.
               CHAIRMAN BROWN: Or is that the median.
11
12
               MR. MEIER: Sorry, it's the median, and in
13
     China it's 13,000, so a little bit of an apples to --
14
               MS. HIRSH: The median salary is $13,000?
15
               MR. MEIER: Yep.
16
               MS. HIRSH: For a family, for a two family --
17
     two worker household?
18
               MR. MEIER: I believe so, yeah. I think the
19
     average per individual is closer to something less than
20
     50.
21
               MS. HIRSH: I was going to say.
22
               MR. MEIER: Getting to performance, perhaps
23
     more importantly, so Dan Haas, who is actually on both
24
     the Risk Team and reports also into Lynn Fleischman,
25
     chief operating officer, has been doing some great work.
0029
 1
     Dan's chart, we're trying to provide more of an
 2
     analytical rigor and to do some wonderful things on
 3
     reporting. So Dan has been quite creative.
                                                 The first
 4
     two slides are things that he put together.
 5
               Kate, if you wouldn't mind going one more
     slide, please? Yep.
 6
 7
               So this is kind of a different look at
     performance. Again, for the third quarter of this year,
 9
     it was very challenging. Total plan return, which
10
     includes private assets, down 2.4 percent. Most of that
11
     largely driven by the selloff that Amanda very
12
     appropriately and accurately talked about in the third
13
     quarter. So some challenging times, but again, tend to
14
     focus on longer term results. Longer term, I don't
15
     think is five years, probably 10, 15, 20 years.
16
               MS. HIRSH: Can I ask you a question about
17
     this one?
18
               MR. MEIER:
                           Sure.
19
               MS. HIRSH:
                           The TRS policy return is like the
20
     benchmark return?
21
               MR. MEIER:
                           That's the strategic asset
22
     allocation.
23
               MS. HIRSH: Like what we anticipate the return
24
     should be?
25
               MR. MEIER: Yeah.
0030
```

```
1
               MS. HIRSH: Or like, why is the plan return
 2
     and the policy return different?
 3
               MR. MEIER: Well, the policy return should be
 4
     7 percent, but this, we're not at all --
 5
              MS. HIRSH: Oh, it's --
 6
               MR. MEIER: Yeah, it has to do with strategic
 7
     asset allocation.
 8
              MS. HIRSH: Oh, I guess I'm confused. I guess
 9
     it looks like --
10
               CHAIRMAN BROWN: I think that's the benchmark.
11
               MS. HIRSH: It's the benchmark, not the
12
     policy, because we're not -- it's at over -- it's like
13
     at 10-and-a-half.
14
               MR. MEIER: Yes. That's not --
15
               (Crosstalk.)
16
               CHAIRMAN BROWN: This doesn't have November.
17
               MR. MEIER: This doesn't have November.
18
              MS. HIRSH: It only goes to September.
19
               (Crosstalk.)
20
              MS. HIRSH: And the median fund, sorry, median
21
     fund tax is like median other public --
22
              MR. MEIER: Yeah, and there's a significantly
23
     higher allocation, typically --
24
              MS. HIRSH: To private.
25
               MR. MEIER: -- to private assets.
0031
 1
              MS. HIRSH: Yeah. So, the three-year and
 2
     five-year, we're doing great.
              MR. MEIER: Yeah, one-year, three-year,
 3
 4
     five-year, again, positive returns pretty much across
 5
     the board, but again, you have a 7 percent
     (indiscernible) rate, so I think if you look at longer,
 6
 7
     you can see that. And actually --
 8
               CHAIRMAN BROWN: I think that 7 percent, if
 9
     you go back --
10
              MR. MEIER: Yeah, we do. I think we get to
11
     that in a few minutes.
12
               CHAIRMAN BROWN: It's coming.
13
               (Crosstalk.)
              MR. MEIER: Yeah, yeah.
14
               On the next slide, Kate, if you would?
15
               Another Dan Haas production, just looking at a
16
17
     thousand dollars invested in the TRS portfolio versus a
18
     7 percent return target, which is compounded. So that
19
     black line is the 7 percent target. It reflects where
20
     we are, particularly shows the selloff we saw in 2022
21
     and the repair that we saw up through middle part of the
22
     summer, and the selloff again in the latter part of Q3,
23
     and this slide will be more meaningful as time
24
     progresses.
25
               On the next slide, a look at the Teachers' net
0032
 1
     public market returns by strategy. Again, tough market
     for three months. You see both equity and fixed income
```

sold off. Again, high yield being a wonderful story with half the duration exposure is investment grade and coupon, as I mentioned. Cash is also getting those three month returns. If you annualize them, probably closer to 6 percent, it probably should be 560 right at, 530, 530 right now. But again, just an interesting way to look at things, and again, focusing on the long term. I think I have some longer term notes. I do, I do in a moment.

On the next slide, a look at Teachers' public market excess returns. Here, a couple things stand out to me. Firstly, the world XUS, that's developed market XUS, underperformed, generated a negative return of a little over 3 percent, 307 basis points, relative to its benchmark. That was driven mostly by two of the managers that tend to be a little bit more aggressive and thoughtful in the stock selection. Again, it was a challenging quarter, but Bailey Gifford and Walter Scott actually underperformed the benchmarks anywhere between 900 basis points and 600 basis points. Again, that's why that reflects a negative performance there and pull down in terms of overall returns.

On the next slide, a look at Teachers' net

private manager returns, which is, I think, a better story. On the far left-hand side, you can see, in one year pretty, much green across the board, private real estate core being the exception. Those are June to June mark to markets. And again, that sector, the core investment has been a little more challenged. But again, if you look at, to your point, Tom, about longer term performance, this is just private markets, but again, it does focus on 10-year and since inception returns that are all positive.

CHAIRMAN BROWN: Oh, good.

MR. MEIER: Yeah. On the next slide, a look at Teachers' private market excess returns, and this is -- you know, I pushed back a little bit because I know private equity has been a little bit challenging in terms of exits and some valuation issues, but the one-year excess returns, so apples to apples, even though it says as of June 30th, those are June to June returns for our private equity book as well as the Russell 3000.

The private equity book, actually, the positions actually returned a positive return to 6.4 basis points, and again to talk more about where Russell 3000 was in the first half of the year was up fully 18.9 percent, so about a 1,200 basis point underperformance

relative to its public market equivalent. Other than that, a fairly positive story. Opportunistic fixed income, the marks are more apparent through September, and that I think is more reflective of credit spread

```
tightening in high yield relative to where we are in
 6
     opportunistic income.
 7
               MR. KAZANSKY: Steve, quick question just on a
 8
     reporting aspect of things. So in our new asset
 9
     allocation, we have moved everything in real estate kind
10
     of into one lump sum?
11
               MR. MEIER: Yes.
12
               MR. KAZANSKY: Will we continue to see, in
13
     future reporting, breakouts that separate core and
14
     non-core opportunistic in real estate, or is it all
     going to just be listed --
15
16
               MR. MEIER: We can do it either way.
     really good question. We can do it \operatorname{--} do you prefer to
17
18
     see both?
19
               MR. KAZANSKY: Yeah, I think it would be --
20
               MR. GLUSZAK: Yeah, we'll be able to -- we'll
21
     be able to continue to provide you guys that breakout.
22
               MR. MEIER: That's John Gluszak.
23
               CHAIRMAN BROWN: I'm sure Dan --
24
               (Crosstalk.)
25
               CHAIRMAN BROWN:
                                Thank you, John.
0035
               MR. GLUSZAK: Actually, the Real Estate Team
 1
     is in the infirmary, so I've got a bummed knee and
     Jackie is out with COVID, so we'll see you next year,
 3
     but Janet is there to take care of everything for us.
 5
               CHAIRMAN BROWN: All right, John, thank you.
 6
               MR. MEIER: And the last slide comes the
 7
     quarterly update, just to look at where we are from a
 8
     rebalancing standpoint. So as -- again, this is,
 9
     obviously, we raised cash, you can see we raised $200
10
    million, and that was for benefit payments for private
11
    market capital calls. We have heard that, you said that
12
    many times.
13
               But as equity sold off, bonds sold off less --
14
     or sorry, bonds actually sold off more than equities,
15
     which is why we actually rebalanced, we sold equities
16
     and bought into fixed income, again, to get closer to
17
     your target weights under the strategic asset
18
     allocation.
19
               MS. HIRSH:
                           (Indiscernible.)
20
               MR. MEIER: This is, yeah, it's been around a
21
     little bit but I think Dan changed a little bit of the
22
     format, the color.
23
               And again, I'll talk more, so we actually had
24
     a new asset allocation targets incorporated for the
25
     preliminary performance review, which I'll do in
0036
 1
     Executive Session.
 2
               CHAIRMAN BROWN: Great.
 3
               MR. MEIER: But with that, any questions about
 4
     anything I covered, didn't cover?
 5
               MR. ZAKRY: Can I ask a question?
 6
               MR. MEIER: Sure.
```

7 MR. ZAKRY: How do you pick the benchmarks and how often do you change the benchmarks? 9 MR. MEIER: I think the benchmarks should be 10 reviewed, to be honest, and that's a project for 2024, 11 for both private and public assets. 12 MR. ZAKRY: When was the last time they were 13 reviewed? 14 MR. MEIER: It predates me. I have been here 15 17 months-plus months, so yeah. 16 MS. HIRSH: I don't know the last time the 17 benchmarks were reviewed, but the benchmarks are, tell 18 me if I'm wrong, benchmarks are part of the IPS 19 statement and voted on by trustees, so it's not -- BAM 20 doesn't pick the benchmarks. BAM would --21 CHAIRMAN BROWN: Yeah, make recommendations. 22 MS. HIRSH: Make recommendations and bring it 23 to the trustees to assess and decide. 24 MR. MEIER: To be candid, I think that the 25 benchmarks were probably determined on more of a 0037 1 fundamental basis, meaning what we thought would make 2 sense, and I'd like to put more of a quantitative rigor 3 around how we analyze that, and really what the performance has been and what more tightly resembles 5 performance of the underlying strategies relative to perhaps different benchmarks. But again, to Alison's 7 point, you have decision rights on that. We would actually take a look at it and come back to the Board. 9 These are a few of the things that I have 10 asked Chief Risk Officer Ed Bergman to focus on. 11 MR. KAZANSKY: I have a question just about the defaults and delinquencies, so what -- because 12 13 there's always that fear that one particular aspect of 14 that, whether it's funnel loans or something that's 15 going to get to a point where the default rate gets so 16 high that it becomes severely problematic for the 17 economy. 18 Do you see that happening in any particular 19 sector there, or do you think it's just, you know, all 20 the money that people saved over COVID is now all spent 21 and they realize they're in a hole? 22 MR. MEIER: I think the defaults, as a general 23 matter, in terms of credit card defaults, and auto loan 24 defaults, even bond defaults, were at historical low 25 levels. They're really compressed by COVID. I think 0038 1 what you're seeing is probably going back to something that's more normal. We'll continue to watch that. Defaults in high yield between 2 and 4 percent is 4 typical, and that is impacted in the yield you get 5 typically in the coupons that want to compensate for 6 that. 7 But it's something that bears watching, and it will have an impact on the economy as people fill up

```
their credit cards, their propensity to spend hopefully
10
     will be lower, and if not, you'll probably see that as
11
     an economic strain.
12
               MR. KAZANSKY: Thank you.
13
               CHAIRMAN BROWN: Thank you. Any more
14
     questions for Steve? A lot of work into the report
15
     today. Much appreciated.
16
               MR. MEIER: Thank you. Yeah, I enjoy doing
17
     this. This is what we do.
18
               CHAIRMAN BROWN: So thank your entire team,
19
     especially Dan Haas for putting those slides --
20
               MR. MEIER: Dan does -- so Dan does a lot of
21
     work, Kate and her team as well, in the headlines. So
22
     yeah, it takes a village, but Dan, Dan really does so
23
     much, so thank you for the time.
24
               CHAIRMAN BROWN: Appreciate it. Very well
25
     done.
0039
 1
               Any more questions?
 2
               Great. This is the time, I quess I'll
 3
     entertain a motion to go into Executive Session.
 4
               MR. KAZANSKY: So moved.
 5
               CHAIRMAN BROWN: Second?
 6
               MS. LEE: Second.
 7
               CHAIRMAN BROWN: Questions? All those in
 8
     favor of going into Executive Session, please say aye.
 9
               (Ayes were heard.)
               CHAIRMAN BROWN: Those opposed, say nay. Any
10
11
     abstentions? We are now in Executive Session.
12
               (Off the record from 10:57 a.m. to 1:06 p.m.)
13
               MR. SWINGLE: There was an update on
14
     preliminary performance data.
15
               There was a real estate presentation.
     Consensus was reached.
16
17
               There was a presentation on a private equity
18
     program. Approval was given.
19
               There was an overview and update on a private
20
     equity partnership.
21
               And there were two infrastructure
22
     presentations in which consensus was reached on both.
23
               CHAIRMAN BROWN: Thank you, Ron.
24
               That's all for the Public Session. Do I hear
25
     a motion to adjourn?
0040
 1
               MR. KAZANSKY: So moved.
 2
               CHAIRMAN BROWN:
                               Is there a second?
 3
               MS. LEE: Second.
 4
               CHAIRMAN BROWN: The motion has been seconded.
 5
     All those in favor of adjourning, say aye.
 6
               (Ayes were heard.)
 7
               CHAIRMAN BROWN: All those opposed, say nay?
 8
     Any abstentions? We are now adjourned.
 9
               (The proceedings were concluded at 1:07 p.m.)
10
```

```
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
0041
                 CERTIFICATE OF DIGITAL REPORTER
 1
 2
 3
               I, SOPHIAN DEFRANCE, a Digital Reporter and
     Notary Public within and for the State of New York, do
 5
     hereby certify:
 6
               That the foregoing proceeding is accurately
 7
     captured with annotations by me during the proceeding in
     the above-titled matter, all to the best of my skills
     and ability.
 9
10
               I further certify that I am not related to any
11
     of the parties to this action by blood or marriage and
12
     that I am in no way interested in the outcome of this
13
     matter.
14
               IN WITNESS THEREOF, I have hereunto set my
15
     hand this 20th day of December 2023.
16
17
18
19
20
21
               Sophian DeFrance, Digital Reporter
22
               Commission No.: 01DE0006274
               Expiration Date: April 26, 2027
2.3
24
25
0042
                 CERTIFICATE OF TRANSCRIPTIONIST
 1
 2
 3
               I, NANCY KRAKOWER, Legal Transcriptionist, do
 4
     hereby certify:
 5
               That the foregoing is a complete and true
 6
     transcription of the original digital audio recording of
 7
     the testimony and proceedings captured in the
     above-entitled matter. As the transcriptionist, I have
 8
 9
     reviewed and transcribed the entirety of the original
10
     digital audio recording of the proceeding to ensure a
```

11	verbatim record to the best of my ability.
12	I further certify that I am neither attorney
13	for nor a relative or employee of any of the parties to
14	the action; further, that I am not a relative or
15	employee of any attorney employed by the parties hereto
16	nor financially or otherwise interested in the outcome
17	of this matter.
18	IN WITNESS THEREOF, I have hereunto set my
19	hand this 20th day of December 2023.
20	
21	
22	
23	
	Nancy Krakower, Transcriptionist
24	
25	