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1 TEACHERS' RETIREMENT SYSTEM OF THE CITY OF NEW YORK

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3 INVESTMENT MEETING

4

5 PUBLIC SESSION

6

7 December 7, 2023

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9 10:12 a.m.

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11 Remote Proceeding

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13 New York, New York 10041

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2 PATRICIA REILLY, TRS EXECUTIVE DIRECTOR

3 THAD MCTIGUE, TRS DEPUTY EXECUTIVE DIRECTOR

4 THOMAS BROWN, CHAIR, TRUSTEE

5 ALISON HIRSH, OFFICE OF THE COMPTROLLER, TRUSTEE

6 KEVIN LIU, MAYOR'S OFFICE, TRUSTEE

7 DAVID KAZANSKY, TRUSTEE

8 VICTORIA LEE, TRUSTEE

9 Also Present:

10 LIZ SANCHEZ, EXECUTIVE ASSISTANT

11 MAREK TYSZKIEWICZ, CHIEF ACTUARY

12 PRISCILLA BAILEY, TRS

13 MICHAEL FLUVIO, ROCATON/GOLDMAN SACHS

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1 (The proceedings commenced at 10:12 a.m.)  
2 CHAIRMAN BROWN: Today is November 7th, 2023.  
3 I'll start by calling the roll.  
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

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1 following along in the material, I'm going to ask you to  
2 flip ahead to Slide 26.

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

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

18           And then if you look over the trailing  
19 12-month period, again, with that strong market rebound  
20 coming out of the COVID period, markets up over 20  
21 percent, with some value-add over the trailing one and  
22 three-year time period for the Diversified Equity Fund.  
23 You can see a lot of that contribution is coming, as you  
24 would expect, from the active manager component of the  
25 US equity composite as well as the international equity

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

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

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

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

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

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1 those funds track their benchmarks very closely.

2           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

5 Mike or Amanda? Great. We can move to the Passport  
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  
17 fared better than energy, which was one of the worst  
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

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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  
4 billion in assets, had a return of negative 3 percent  
5 for the month of October, and within that, the passive  
6 US equity at negative 2.6 percent was the best  
7 performing segment of the Diversified Equity Fund, with  
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  
11 option for the market. It is more conservatively  
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  
20 oriented fund, did trail a little bit versus its  
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.

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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,  
4 partly due to timing of cash flows.

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

7 CHAIRMAN BROWN: Any questions for Amanda?  
8 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.

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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  
4 did quite well. Emerging markets standing out as maybe,  
5 I'll say the laggard, still up 8 percent for the month.  
6 So it was very strong across the board.

7 If you're looking at the global market  
8 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  
13 over 17 percent. So we will -- we will take the  
14 exuberance that came with comments from the FO -- some  
15 FOMC members around the moderation in inflation that  
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 MS. REILLY: 2.5.

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.

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1 CHAIRMAN BROWN: Thank you.

2 MR. FULVIO: And again, I think a lot of the  
3 market performance we saw, really being driven by the  
4 comments we heard from the Fed, acknowledging  
5 moderation, legislation, wage growth, all of that  
6 leading to investors being a little bit more exuberant  
7 around the potential for interest rate cuts in 2024.

8 The market, I think last I saw this week, this

9 pricing cuts as early as second quarter may. Yeah,  
10 we're saying probably later in the year, in terms of our  
11 outlook. We also do think there is still, albeit  
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. So  
24 something else we're thinking about looking out into  
25 2024. I'm sure Steve has comments that he'll make as

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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  
6 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  
14 to the Pension Fund Performance Update Quarterly  
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  
22 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.

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1 UNIDENTIFIED SPEAKER: An hour-and-a-half.

2 MR. MEIER: It'll feel like an  
3 hour-and-a-half, it'll be 15 minutes.

4 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

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

14 On the next slide, inflation, you can see as a  
15 reminder, CPI in white actually peaked at 9.1 percent in  
16 June of 2022. It's now at about 3-and-a-quarter  
17 percent, so it's really come down significantly. Core  
18 PCE deflated has been a little more sticky in the mid  
19 3s, but expectations are for them to continue to move  
20 lower.

21 On the next slide, actually the European Union  
22 surprisingly on the downside with inflation. Their most  
23 recent chart showed inflation coming in around  
24 2-and-a-half percent, which is below the estimate of 3.8  
25 percent, so some good news there. But again, a general

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1 decline in inflation levels around the world.

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

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

23 UNIDENTIFIED SPEAKER: Tomorrow?

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

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

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

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

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

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

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

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

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

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

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1 month.

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

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

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

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

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

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

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

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

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1 But over the last year, for the full year 2023, the  
2 60/40 portfolios generated a return of 11 percent, which  
3 is significant.

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

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

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

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

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1 year-to-date.

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

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

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

19 If you skip ahead to recent news, Kate?

20 A couple of things I talked about in China,  
21 Chinese economy. It has been very challenged,  
22 particularly by the property market there. The shadow  
23 banking system, I don't know if you read the Wall Street  
24 Journal, there was an article yesterday that it is  
25 significantly struggling with off balance sheets or

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

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

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

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

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

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

3 CHAIRMAN BROWN: He's been quiet.

4 MR. MEIER: Yeah.

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

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

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

20 A huge runup in Japanese stocks. I remember  
21 they peaked in 1989. The Russian Finon as well after  
22 the Cold War, where those prices ran up and it came  
23 straight back down. The tech bubble we saw in 1998,  
24 '99, which crashed 2000, 2001. Obviously, very  
25 challenging time there, but that market recovered, and

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

7 Actually the next slide, Kate?

8 The next slide actually distinguishes the S&P  
9 500 returns relative to -- well, the top seven stocks  
10 relative to the other 493. This is referred to as the  
11 magnificent seven, which has really dominated S&P 500  
12 performance with average returns of slightly over 80  
13 percent year-to-date, which is really extraordinary.

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

19 UNIDENTIFIED SPEAKER: Tesla?

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

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

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

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

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

22 Probably in the second half, Mike, of 2024?

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

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1 of lending, as the banks have pulled back.

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

20 Next slide. This is really interesting to me  
21 because it started to be more of an awareness. The  
22 market was very focused on macro trends in the economy

23 and the Fed policy. There was a little bit of a pivot  
24 in October, when bonds pulled off really quite  
25 significantly before the rally in November. It had more  
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1 to do with fiscal concerns and the amount of debt that  
2 we're issuing. And I have said, I think at prior  
3 meetings, that we have saw -- we're expecting to see an  
4 average option for US Treasury debt to increase 24  
5 percent in 2024 loans. So the question is, who will the  
6 marginal buyers be?

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

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

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

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1 This is constraining growth in the world's second  
2 largest economy. Again, it's hard to draw a parallel  
3 between the Chinese economy and the US, the US being  
4 larger, is a more developed economy. The average  
5 earnings in the US, I believe it's about \$76,000 per  
6 annum per household, versus in China, it's around  
7 13,000. So kind of an apples to orange comparison, but  
8 China is an engine for growth for the global economy,  
9 and the fact that it is weakened and not performing to  
10 expectation has implications for global growth.

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

17 (Crosstalk.)

18 CHAIRMAN BROWN: Is going up?

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

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

25 tied to the property market. There's been two defaults  
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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  
4 it's unregulated, and I even saw in the article the  
5 words "Lehman moment" came up, so. I don't -- I  
6 wouldn't be that dramatic, but it is something that  
7 there's --

8 CHAIRMAN BROWN: Steve, I'm sorry, did you say  
9 the average salary in the United States was \$76,000?

10 MR. MEIER: Yeah.

11 CHAIRMAN BROWN: Or is that the median.

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.

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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  
6 slide, please? Yep.

7 So this is kind of a different look at  
8 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.

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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.

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1 MS. HIRSH: Yeah. So, the three-year and  
2 five-year, we're doing great.  
3 MR. MEIER: Yeah, one-year, three-year,  
4 five-year, again, positive returns pretty much across  
5 the board, but again, you have a 7 percent  
6 (indiscernible) rate, so I think if you look at longer,  
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.)  
14 MR. MEIER: Yeah, yeah.  
15 On the next slide, Kate, if you would?  
16 Another Dan Haas production, just looking at a  
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

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1 public market returns by strategy. Again, tough market  
2 for three months. You see both equity and fixed income

3 sold off. Again, high yield being a wonderful story  
4 with half the duration exposure is investment grade and  
5 coupon, as I mentioned. Cash is also getting those  
6 three month returns. If you annualize them, probably  
7 closer to 6 percent, it probably should be 560 right at,  
8 530, 530 right now. But again, just an interesting way  
9 to look at things, and again, focusing on the long term.  
10 I think I have some longer term notes. I do, I do in a  
11 moment.

12 On the next slide, a look at Teachers' public  
13 market excess returns. Here, a couple things stand out  
14 to me. Firstly, the world XUS, that's developed market  
15 XUS, underperformed, generated a negative return of a  
16 little over 3 percent, 307 basis points, relative to its  
17 benchmark. That was driven mostly by two of the  
18 managers that tend to be a little bit more aggressive  
19 and thoughtful in the stock selection. Again, it was a  
20 challenging quarter, but Bailey Gifford and Walter Scott  
21 actually underperformed the benchmarks anywhere between  
22 900 basis points and 600 basis points. Again, that's  
23 why that reflects a negative performance there and pull  
24 down in terms of overall returns.

25 On the next slide, a look at Teachers' net

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

11 CHAIRMAN BROWN: Oh, good.

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

21 The private equity book, actually, the  
22 positions actually returned a positive return to 6.4  
23 basis points, and again to talk more about where Russell  
24 3000 was in the first half of the year was up fully 18.9  
25 percent, so about a 1,200 basis point underperformance

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

5 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  
15 going to just be listed --

16 MR. MEIER: We can do it either way. That's a  
17 really good question. We can do it -- do you prefer to  
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.

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1 MR. GLUSZAK: Actually, the Real Estate Team  
2 is in the infirmary, so I've got a bummed knee and  
3 Jackie is out with COVID, so we'll see you next year,  
4 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

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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  
8 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

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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  
4 performance has been and what more tightly resembles  
5 performance of the underlying strategies relative to  
6 perhaps different benchmarks. But again, to Alison's  
7 point, you have decision rights on that. We would  
8 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  
12 the defaults and delinquencies, so what -- because  
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

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1 what you're seeing is probably going back to something  
2 that's more normal. We'll continue to watch that.  
3 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  
8 will have an impact on the economy as people fill up

9 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.

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1 Any more questions?

2 Great. This is the time, I guess 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.)

10 CHAIRMAN BROWN: Those opposed, say nay. Any  
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.

16 Consensus was reached.

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?

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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.)

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19 hand this 20th day of December 2023.

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