1 2 3 4 5 6 NEW YORK CITY TEACHERS' RETIREMENT SYSTEM 7 INVESTMENT MEETING 8 9 Held on Thursday, December 1, 2022 Via Videoconference 10:05 a.m. 10 11 ATTENDEES: 12 DEBRA PENNY, Chairperson, Trustee DAVID KAZANSKY, Trustee 13 14 THOMAS BROWN, Trustee BRYAN BERGE, Trustee, Mayor's Office 15 16 ALISON HIRSH, Trustee, Comptroller's Office 17 RUSSELL BUCKLEY, Trustee SUSAN STANG, Teachers' Retirement System 18 19 SAMANTHA AMILTON, Rocaton 20 DEVON ALEXANDER, Rocaton 21 MICHAEL FULVIO, Rocaton 22 VALERIE BUDZIK, Teachers' Retirement System 23 REPORTED BY: 24 YAFFA KAPLAN JOB NO. 8935815 25

2 ATTENDEES (Continued):

3	LIZ SANCHEZ, Teachers' Retirement System
4	THAD McTIGUE, Teachers' Retirement System
5	DAVID LEVINE, Groom Law Group
6	STEVEN MEIER, Comptroller's Office
7	JOHN DORSA, Comptroller's Office
8	KOMIL ATAEV, Teachers' Retirement System
9	RON SWINGLE, Teachers' Retirement System
10	KATE VISCONTI, Bureau of Asset Management
11	JONATHAN LESSER, Bureau of Asset Management
12	ALLEN MACDONELL, Bureau of Asset Management
13	ROBERT FENG, Bureau of Asset Management
14	JOHN MERSEBURG, Bureau of Asset Management
15	JENNIFER GAO, Bureau of Asset Management
16	TINA SUO, Bureau of Asset Management
17	ED BERMAN, Bureau of Asset Management
18	MITCH FIELDING, Bureau of Asset Management
19	DAN HAAS, Bureau of Asset Management
20	NOZA SHUMANOV, Bureau of Asset Management
21	KAREN BARCLAY, Bureau of Asset Management
22	SANDY XU, Bureau of Asset Management
23	WILFREDO SUAREZ, Bureau of Asset Management
24	TOM CARROLL, Bureau of Asset Management
25	MAREK TSYZKIEWICZ, Office of the Actuary

ATTENDEES (Continued):: JOHN ADLER, Mayor's Office ISAAC GLOVINSKY, TRS SUMANTE RAY, Mayor's Office KEVIN LIU, Mayor's Office SEAN BARBER, Hamilton Lane

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2	MR. McTIGUE: Good morning, everyone. I
3	would like to welcome you to the Teachers'
4	Retirement System. I will call the roll.
5	Bryan Berge.
6	MR. BERGE: Bryan Berge representing
7	Mayor Eric Adams.
8	MR. McTIGUE: Thomas Brown?
9	MR. BROWN: Here.
10	MR. McTIGUE: Russell Buckley?
11	MR. BUCKLEY: Here for Panel For
12	Educational Policy Chair Dr. Angela Green
13	present.
14	MR. McTIGUE: Alison Hirsh?
15	MS. HIRSH: Here for Comptroller Brad
16	Lander.
17	MR. McTIGUE: David Kazansky?
18	MR. KAZANSKY: Present.
19	MR. McTIGUE: Debra Penny?
20	MS. PENNY: I am here. Good morning.
21	MR. McTIGUE: Madam Chair and Board
22	members, we have a quorum.
23	MS. PENNY: Thank you so much, Thad.
24	Good morning. We are going to start with the
25	third quarter 2020 review. I believe we have

Mike Fulvio.

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3 MR. FULVIO: Great. Good morning, everyone. I am going to share my screen which 4 5 hopefully folks are able to see. Okay. So I 6 was only going to touch upon the quarterly 7 report briefly as this was distributed ahead of time, and we did previously review the 8 9 performance, but just as a reminder for 10 everyone, the third quarter was another market 11 selloff in both the US and abroad in terms of 12 the equity markets. In the returns here for the Passport Funds. For the Diversified 13 14 Equity Fund about down 5 and three-quarter 15 percent for the third quarter. That brought the year to date return to 9.30. The Balanced 16 17 Fund did notably better given it's 70 percent 18 allocation to fixed income. Though still negative return at about 3.7 percent. 19 The 20 International Equity Fund we saw a deeper 21 selloff in nonUS markets was down about 9.4 22 percent for the quarter ahead of its benchmark 23 and then the Sustainable Equity Fund down 24 about 5 percent, the US Equity Index Fund down 25 4 and a half percent and International Equity

1	Proceedings
2	Index Fund down about 10.3 percent. We will
3	touch upon a couple more detailed items in
4	this report in the executive agenda under the
5	manager update section.
6	MS. PENNY: Thank you, Mike. Does
7	anyone have any questions for Mike? Okay. We
8	hope you feel better, Michael. Next we have
9	the Passport Funds October 2022 performance
10	review. Amanda?
11	MS. JANUSZ: So Mike shared the negative
12	results for September. Thankfully for October
13	we did have positive absolute returns really
14	across the board for the funds. For the
15	Diversified Equity Fund, up about 7.2 percent
16	for the month which puts it at around negative
17	20.8 percent for the year to date period.
18	Both the passive and active components
19	contributed around 8 percent. Non-US markets
20	were more challenged than US markets during
21	the month of October, particularly China still
22	struggling from their zero COVID policy there.
23	The Balanced Fund was the worst
24	performance for the month but still positive
25	about 1.7 percent. Some of the bond

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2 components of that strategy detracted down 3 around 12 percent year to date and the International Equity Fund up around 4 percent 4 5 for October, which put it around negative 25 6 percent year to date, and some of the active 7 management there did contribute to the index 8 which returned 3 percent for the month. 9 The Sustainable Equity Fund was positive 10 3 percent for the month, which put it at 11 negative 3 -- negative 30 percent for the year 12 to date through the end of October, and you can see the passive options at the bottom of 13 14 the page here, both the US and international 15 equities, which were in line with their benchmarks. So all in all very positive month 16 17 after quite a few negative months in a row 18 here, so glad to see that and thankful that trend has continued here into November as 19 20 well. 21 MS. PENNY: We really welcome you and I 22 apologize so we are joined by -- so Amanda, 23 your last name? 24 MS. JANUSZ: Janusz. 25 MS. PENNY: And Samantha?

Proceedings 1 2 MS. AMILTON: Amilton. MS. PENNY: Who are two new or new to 3 our TRS's account at Rocaton, so they are 4 5 representing Rocaton. So welcome and if you 6 keep up the good work with giving us all 7 positive numbers, we will let you stay there. MS. JANUSZ: Mike let me do the good 8 9 numbers. 10 MS. PENNY: That's very nice of you, 11 Michael. So let's see what Devon could do. 12 Any questions for Amanda? Okay, Devon, no pressure but we have November 2022. 13 14 MR. ALEXANDER: I will try to keep the 15 theme consistent here. So for the month of November, we expect to have positive results 16 17 on all fronts. Actually global market 18 composite benchmark is up positive 6.6 percent. And fiscal year as well I would also 19 20 admit it's also positive to 7.67 percent. 21 Diversified Equity Fund hybrid benchmark is 22 up, positive 6.72 percent for the month and 23 positive 7.76 for the fiscal year. 24 Switching over to the Balanced Fund 25 benchmark, again positive 3 and a quarter

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2	percent, positive for the year, fiscal year
3	1.42 percent. On the international equity
4	benchmark, international composite benchmark,
5	we see astronomical results compared to the
6	domestic market, positive 11.93 percent and
7	positive for the fiscal year 3.97 percent,
8	almost 4 percent. Sustainable Equity Fund
9	benchmark we have positive almost 6 percent
10	for the Brown Advisory Sustainable Growth Fund
11	and 4.56 percent for the Sustainable Fund
12	composite benchmark.
13	Moving down to the International Equity
14	Index Fund benchmark, again 13.49 percent for
15	the month and 5.14 for the fiscal year to
16	date. So overall the themes have been
17	consistent. We have seen positive results,
18	and we hope that that continues. Although we
19	do want to caution that it may just be a bear
20	market rally, but in any event we will take
21	it.
22	MS. PENNY: Now we expect this. Thank
23	you. So any questions for Devon? Okay. Keep
24	up the good work. I don't know, Michael.
25	Looks like you are the only one that did not

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2	give us good news.
3	MR. FULVIO: I was the one who fell on
4	my sword for them.
5	MS. PENNY: So now we are into the
6	public session of the pension fund and we have
7	the quarterly performance review. Steve, do
8	you want to?
9	MR. MEIER: So, thank you, Madam Chair.
10	So I put together what I thought was a short
11	slide deck and realized at 4:30 this morning
12	it's actually a lot longer than I anticipated.
13	I can't help myself, but I will go through
14	this pretty quickly. Just give you a quick
15	overview what's going on in the market and how
16	it's impacting our investments and talk about
17	performance for the third quarter.
18	So inflation continues to be a problem
19	for the US, for the Fed, for the White House.
20	It is at a near 40-year high still. It's come
21	off the boil a little bit, so I think the
22	fourth quarter more recent numbers are
23	positive in terms of the direction that they
24	are moving. We still see a significant amount
25	of rate price pressures from an employment

Proceedings 1 2 strength. We also still see a little bit supply chain bottlenecks associated with the 3 lockdowns and COVID protocols in China as well 4 5 as energy price shocks associated with the war 6 in Russia and Ukraine. Chair Powell yesterday stated in his prepared testimony that 7 inflation has spread broadly throughout the 8 9 economy, and their task is significant. Next slide, please. 10

11 In terms of inflation, you can see in 12 the upper right-hand side, it's come off the boil a little bit. Now it's 8 percent from a 13 14 CPI perspective. The core PCE deflator in 15 yellow is actually 5.1 percent. It's a little 16 stickier. It actually came in this morning at 17 5 percent for November, off of the revised 5.2 18 percent for October. So moving in the right direction. Next slide. 19

Inflation certainly isn't just a
phenomenon here and a problem here in the US.
You can see the red line is the US inflation
measured by CPI, again coming off the boil as
I said. Still a big problem in the UK at 11.1
percent and in the European Union at 10

1	Proceedings
2	percent. Actually, 10 percent has come down
3	from 10.6 but still a problem. There has been
4	a decline in energy prices in Europe very
5	recently that moved that down a little bit but
6	still a struggle.
7	Expected inflation in the next slide,
8	Kate you can see come off the expectations
9	around the University of Michigan survey.
10	It's come down a little bit. Still pretty
11	sticky calling for 4.9 percent inflation
12	expected over the next 12 months. Employment
13	on the next slide. Employment has actually
14	been very robust. It's been little bit of a
15	challenge for the Fed. In the third quarter,
16	early fourth quarter, it was at a 50-year low,
17	3 and a half percent unemployment. You can
18	see these headlines that it came in in
19	September, 263,000 job growth. 261,000 in
20	October. We have a new November unemployment
21	report tomorrow. The expectation, the
22	consensus estimate is around 200,000, so we
23	will see where that winds up but still a
24	challenge. Next slide.
25	Again, that's a graphical depiction what

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2 it reflected. 3.7 percent in the lower 3 right-hand side in white and the participation rate which is something the Fed certainly 4 5 focuses on is still relatively low to where it 6 was pre-pandemic about a point lower. We 7 still have the post-COVID persistent imbalance in our labor market. There are over 4 million 8 9 open positions than labor force supply and the 10 Fed hopes to balance the labor market by 11 slowing job growth. The next slide. The 12 economy actually perked up quite a bit in the third quarter this year, it was revised 13 14 upwardly yesterday to 2.9 percent. Remember 15 that is coming off two consecutive guarters of 16 negative GDP growth in the first and second 17 quarter of this year so showing some level of 18 resilience. The fourth quarter so far looks fairly to moderately strong, 3.4 percent 19 20 expected. Again, economic growth is still 21 powering along. You see more on a global 22 perspective on the next slide still a little 23 bit sluggish relative to where it had been, 24 and I call your attention to the red line. I 25 changed the color of this presentation.

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2	That's China and you can see they have been an
3	engine for global growth, 7, 8, 9 percent
4	growth consistently for many years and they
5	are continuing to struggle with COVID, and I
6	think the expectation is around 2, 2 and a
7	half percent growth for this year. So still a
8	problem. Growth is somewhat sluggish, but we
9	will see where we go in 2023. Next slide.
10	Some of the factors impacting US growth
11	you can see there has been pretty dramatic
12	historical decline in existing single-family
13	home sales, and this actually looks at the
14	period from the Fed's first rate hike to where
15	we are today in that red lower left-hand line
16	shows there has been about a 22 percent
17	decline in family home sales since the first
18	hike in March so again, slowing down in the
19	economy here. Next slide.
20	Housing inflation is expected to come
21	down as well. We have new lease inflation
22	decline which is the green line and the
23	expectation for that to continue to 2023. And
24	the owners equivalent rent looks like it's
25	nearing a peak in expectations. That should

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2 level off and perhaps lower. Next slide. 3 There is also a lot of resiliency and strength among consumers. US consumer is pretty strong 4 5 right now. There had been a buildup of what's 6 referred to as dry power, 2.6 trillion 7 dollars. On the lower right-hand side, you 8 can see we have been busy as an economy 9 working that off in 2022 and spending about 10 620 billion dollars of that reserve. On the 11 next slide, you can see that also corresponds 12 with an increase in credit card and consumer debt which has moved up pretty significantly 13 14 particularly for the lower wage earners, so we 15 are getting back to normal, but I don't know if that's necessarily a healthy sign of 16 17 increased credit card debt. Next slide, Kate. 18 In global interest rates, the Fed has 19 been very aggressive. They have supersized

been very aggressive. They have supersized rate hikes. It's on four now, four 75 basis points in addition to 50- and 25-basis-point rate hike. It only started in March so there has been a very aggressive path to raising rates quickly to fight that elevated inflation. Similarly, we have had the same

1	Proceedings
2	magnitude or perhaps not magnitude but
3	direction of hikes in Europe. There is a
4	meeting of the Fed on the 13th and 14th of
5	this month. The Fed is expected to increase
6	rates by 50 basis points, but we will see what
7	the employment report looks like tomorrow and
8	CPI looks like next week before that happens.
9	December 15th is the next ECB meeting, and the
10	expectation are for perhaps another
11	75-basis-point rate hike.
12	On this slide and I love this slide.
13	you can see on the far right-hand side the
14	hiking cycle we experienced in 2022. Again,
15	pretty dramatic and pretty straight up.
16	Compare that to some of the more recent hikes
17	in say 2014 to '15 where the Fed hiked once
18	and was on hold for about a year and went 25
19	basis points every other meeting. If you look
20	at 2003, the early part of 2000s, we have 17
21	consecutive 25-basis-point rate hikes. So
22	much more measured so this has been pretty
23	extraordinary.

On the lower part of that chart, itshows the financial conditions index. It's

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2 noteworthy because the financial conditions 3 have actually eased a bit and that's not really the direction the Fed wants to go in 4 and that's dictated by a number of things: 5 6 The reduction in interest rates with increase in bond prices, the rallies we see in stocks, 7 and a number of other factors that have kind 8 9 of come off the boil. What was noteworthy about Chairman Powell's remarks yesterday were 10 11 he didn't mention financial conditions which 12 the market took as a positive side that he is 13 not pushing back on the recent rally in prices. The next slide, Kate. 14 15 This is just a different look at again 16 how fast and furious the Fed has been raising 17 rates in 2022. Skip ahead, Kate, two pages,

18 please. Credit spreads and US treasuries. 19 The big news has been more recently in the 20 press the 2 and 10 spreads which typically you 21 have a yields premium associated with longer 22 term investment bonds so 10-year yields 23 typically and traditionally are much higher 24 than say 2s. That market grew and is now 25 inverted with 2 years trading around 4.32 this

1	Proceedings
2	morning relative to 10s at 350. That yield
3	spread is about negative 72 basis points.
4	It's probably going wider. It's been at an
5	all-time wide in 1981 at 250 basis points, but
6	that tells us a couple of things. It tells us
7	the market, bond market in particular is
8	pricing in recession in the coming months.
9	That's not really what we are seeing certainly
10	in the third and fourth quarters, so I think
11	2023 is going to be a more challenging year
12	for the US economy. Next slide.
13	This is just a depiction of what that
14	looks like on the left-hand side the treasury
15	yield curve. Since we last met, the 11.29

figure in red, on the far left-hand side of

the left-hand chart, you can see there has

we are in longer term, 10-, 20-, 30-year

the 2- and 10-year spread widening out.

Again, it's rare and it's about 72 basis

The next slide looks at credit spreads.

Not a lot of news in terms of investment grade

points today.

bonds. On the right-hand side, you can see

been a spike in short rates relative to where

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2 spreads. It moved up a little bit in the 3 black line. The red line you see in high yield spreads is a little bit more volatile. 4 5 Right now it's around 435 basis points over 6 comparable maturity treasuries. They have 7 been as wide as 600 and that may be driven by a number of things. The fact that there 8 9 hasn't been a lot of high yield bond issuance 10 and both retail and institutional flows into 11 the high yield markets as those yields have 12 topped 8 to 10 percent. Next slide. The dollar continues to be strong 13 14 although it's come off the boil a little bit. 15 It's been I would say comparatively good for 16 the US to have slightly stronger dollar 17 because it dampens inflation. We don't import 18 as much inflation. It does serve to make our goods less competitive abroad, and as US 19 20 corporations repatriate sales and revenue from 21 their activities abroad, it actually hurts the 22 performance and comes down a little bit. 23 As I have said, we have seen the dollar 24 weaken a little bit recently, and on the next

slide you can see some charts. When we last

2 spoke, the US dollar relative to the euro was 3 trading at about 97 percent. So each euro bought 97 cents. Today it buys a dollar 4. 4 5 The British pound was buying about a dollar 3 6 at its bottom and now buys over a dollar 20 7 and finally US dollar was buying 150 yen and now buys about 139. So it is a little bit 8 9 weaker over the course of the last couple of weeks and months. 10 On the next slide, I love the first 11 12 upper left-hand side headline. "Bonds may be having their worst year yet". And if you read 13 14 the content below, it says, "since at least 15 1926 and maybe in centuries". Now, the good 16 news is it says most of the damage is behind 17 us which I suspect is probably correct given 18 the artificially compressed levels we saw at 19 the early part of the year. We saw volatility 20 in both stocks and bonds although that's come 21 off a bit particularly in stocks and the bond 22 market rally and stock market rally have 23 increased as expectations for rate hikes slow 24 down occurred.

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On the next slide, one of my favorite

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2 Bloomberg slide. Actually meeting with Ed 3 yesterday, we went through this. This is really remarkable when you look at the far 4 5 right-hand side. The basis point yield 6 changes that we have seen across the developed 7 markets and sovereign debt, so again US treasury 10 years moving up 220 basis points 8 9 year to date through early this week. It's 10 pretty remarkable. Again, the moves of this magnitude is not typically seen in a bond 11 12 market. On the next slide, as I mentioned market volatility when we last met, the VIX 13 14 was about 30. On average over the last 30 15 years it's coming in 19. This morning it's printing around 20, so it's come down quite a 16 17 bit in equity land. On the far right-hand 18 side you can see the IMOVE index is still elevated as bond prices continue to see a fair 19 20 bit of volatility, which I think will 21 continue. 22 On the next slide, market returns on the

23 left-hand side, you can see those are equity
24 market returns, the Russell 3000 in blue, the
25 developed non-US international in gray, and

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2 the emerging market equities in red. All of 3 those are down. The Russell 3000 still down about 18 percent year to date, developed ex-US 4 5 down 23 percent, and emerging markets 6 continues to struggle at a little below negative 30. On the right-hand side, again 7 unprecedented, the Barclays Ag -- should say 8 9 the Bloomberg Ag as it's been renamed -- down about 16 percent year to date again, which is 10 11 a fairly dramatic move you can see over the 12 ten-year period. It's quite unusual. On the next slide, just look 60/40 split portfolio 13 14 underperforming by about 16 percent so the 15 balanced 60/40 portfolio again unprecedented in terms of its downside exposure. 16 17 And lastly, just a couple of headlines. 18 Other things that are interesting in the market. On the upper right-hand side, FTX 19 20 collapse has been obviously a lot of issues 21 around crypto. Currency selloffs associated 22 with those assets, bankruptcy filings, so 23 again that risk asset is not performing very 24 well recently. I think that will probably 25 continue.

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2 Below that, just a sense that we have 3 had three British prime ministers in three months which has been an incredible amount of 4 5 volatility, and on the upper right-hand side 6 we have seen credit spreads for Credit Suisse 7 widen pretty dramatically. The 5-year credit default swap spreads yesterday were pricing 8 9 over 400 basis points, which is significant. 10 We will see where that goes. Ukraine war 11 continues to impact global growth and human 12 tragedy there as well. And finally, on the lower right-hand 13 14 side, the China is still wrestling with COVID 15 and an increase in unrest associated with 16 COVID protocols. They may switch or any 17 change too in the coming weeks or months. The 18 next two slides, and I will get into the 19 performance just food for thought. Again, 20 there is no predictive value here, but this is 21 a chart of the VIX. Recently overlaid with the VIX back in 2006 to 2009. It looked like 22 23 they pretty closely mirror one another. 24 Again, no predictive value but I think just 25 interesting to look at where the VIX is

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2 relative to where it's been prior to the 3 market selloff. I think even perhaps more interesting is the next slide, and again, I 4 5 have to caveat that there is no predictive 6 value, but this actually looks at the S & P 7 chart relative to the S & P back in 2006 to 9 and again, you can look where it starts to 8 9 really drop off in the green. That's during 10 the Lehman default crisis in September 2008. Again, no predictive value but just things to 11 12 think about. I think the US economy and the markets 13

14 have experienced certainly a rate shock. I 15 think there is an earnings shock coming 16 associated with the rate rise and potential 17 liquidities shock, so again no predictive 18 value, but my expectation, I wouldn't be 19 surprised to see increased volatility in the 20 first half of 2023. And on that happy note, 21 maybe move to the public market returns on 22 slide 32, Kate.

Again, it's been a tough year, tough
quarter and tougher year. You can see those
are the various benchmarks that are down

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2 pretty substantially in the third quarter and 3 certainly for the year. So it's been a challenging year to say the least. The 4 5 expected returns on the far right-hand side 6 are actually an average of the five 7 consultants across the five public pension 8 fund plans, but again, those expected returns 9 are over a ten-year period. That's more 10 informational value. I don't think that's a 11 fair comparison where we are in five years and 12 certainly not in one year. On the next slide, this is actually a 13 14 look at the Teachers' performance relative to 15 strategy, and again tough guarter, tough year 16 with the exception in cash which unfortunately we have zero official allocation or total 17 18 allocation to, but we do have some element of cash to meet capital calls and distributions 19 20 but it's a challenging year. I think the 21 important thing to focus on, however, is 22 notwithstanding the pain we have seen recently 23 is five-year outcomes are actually still 24 pretty strong, and you have to look at the 25 significant drawdown in asset prices in 2022

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2 because it's been so substantial it's weighing 3 down on the 3- and 5-year returns as well. On the next slide to speak a little bit 4 5 more positive, these are the private market 6 returns by strategy. You can see they held up 7 well certainly in one year in the plus zone although they have come down a little bit. 8 9 These are as of marks in performance to June 30th of this year with the exception of OFI 10 11 which is mostly through September 30th. I 12 think most importantly you look at the 10-year 13 performance since inception, and the performance has been quite solid. And I think 14 15 that the private markets have been a good source of diversification and balance for the 16 17 portfolio year to date. Teachers' total plan 18 assets shows a return 3 months negative 4.7 19 percent for the third quarter and one year 20 down 14 percent. Again, challenging year and 21 challenging environment. However, it is 22 outperforming its policy return. Again, which 23 uses public market proxies for private assets 24 which kind of skews things a little bit, but 25 again in line with what we would expect given

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2 the general market. On the next slide, Kate, 3 just a look at the performance. So the good news, the excess return is about 97 basis 4 5 points. That's largely driven by investment 6 manager selection on the far right-hand side 7 of 106 basis points. On the next slide, just 8 a look at the public market excess returns. 9 Again, it's been a challenging year but there 10 is some glimmer of light here. In three 11 months, we have been seen slight 12 outperformance in emerging market equities and core fixed income. As well as an ETI mandate 13 14 which is relatively small on a comparative 15 basis, but again, I try to focus more on the 16 five-year excess returns what we have done in 17 the longer time horizon, which is a bit more 18 positive. Obviously the thing that stands out 19 to me on the slide is the one-year excess 20 returns in the world ex-US and emerging 21 markets down 561 basis points and 252 basis 22 points respectively. It's been a tough year 23 in those particular strategies, and I know 24 John Merseburg is here and can certainly 25 answer questions on how that's occurred, where

1	Proceedings
2	we think this goes over time.
3	And one more slide. Private market
4	excess returns, a much more positive story.
5	Certainly for one year, three years, five
6	years, and since inception with the one caveat
7	or the one exception of the private real
8	estate noncore opportunistic at negative 760
9	basis points. That's due to the fact that a
10	lot of the recent investments are still in the
11	J curve period where they are subject to
12	capital calls but not distributions. There is
13	also a little bit of a drag associated with
14	multifamily exposure in New York City housing
15	with rent control and rent freezes that kind
16	of hurt some of the valuations of the
17	underlying holdings. Also the fact that
18	Teachers was investing in real estate ahead of
19	and into and through the Global Financial
20	Crisis has been a little bit of a drag, and
21	finally the hotels, we have had some COVID
22	exposure that have hurt hotels and retail
23	space. This is reflected in that one area of
24	underperformance. I did go through this with
25	John Gluszak, our asset class head of real

Proceedings 1 2 estate yesterday, and he actually gave me a 3 couple of interesting statistics that I wanted to share. 4 5 So if you look at the performance from 6 the vintage 2002 through 2010, real estate 7 investments in core and noncore, they are up about 8.5 percent, generating 8.5 percent 8 9 annual return, and from 2011 to 2018 again 10 outside of that J curve, they have produced returns of 14 and a half percent and relative 11 12 to its public market equivalent benchmark, it's about 500 basis points over. So it's a 13 14 good story. Not a great story but very good 15 story in terms of where we are more recently. One more slide. Just a look at the 16 17 rebalancing, Kate. 18 We have John Merseburg here. I went through this with him yesterday. Most of the 19 20 rebalancing was really to adjust our equity capital market weightings as well as to move

capital market weightings as well as to move
from the Russell 1000 to the Russell top 200.
But nothing dramatic or unusual about those
changes. And last slide, Kate.

25 Just a look at our under and

1	Proceedings
2	overweights, and again we traditionally have
3	been overweight cash because we have a zero
4	target allocation. And other than that, we
5	are pretty much in line with every strategy
6	and every underlying asset class.
7	Any questions? I know I kind of have
8	gone through this quickly. Bryan?
9	MR. BERGE: So that's pretty dire macro
10	economically overall and my reaction is to try
11	to find glimmers of hope and I need you to
12	defeat that reaction of mine. Is it wrong to
13	view recent yield curve movement and the
14	weakening of the currency relative to other
15	countries also experiencing inflation as a
16	market indicator of reduced future inflation
17	in the United States? Which I mean, that
18	seems to be driving everything these days.
19	Like what inflection is likely?
20	MR. MEIER: I think it's also
21	perception, so we have had Fed Chair Powell
22	yesterday gave some very interesting remarks.
23	What's interesting it does look like the Fed
24	is in a we talked about the pace of rate
25	hikes likely to moderate as early as December

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2 and the market took that to mean instead of a 3 75-basis-point rate hike, there is probably going to be a 50-basis-point rate hike which 4 5 is priced in, and after that it's more fair 6 game. I don't know if that answers your question, but the idea that we are starting to 7 8 see the proper move down in inflation here and 9 again monetary policy acts with a very 10 variable and long-term lag, so the Fed I think 11 is being rightly cautious. Having said that, 12 I didn't see or read anything in the 13 commentary yesterday that made me think the chairman was being dovish at all. In fact, he 14 15 talked about having to get to a higher level 16 than had been previously anticipated in their 17 forecast of economic expectations in 18 September. We will get revisions on the 14th of December as well as that 50-basis-point 19 20 rate hike probably but the prior expectation 21 about 4.6 percent in terminal Fed funds rate. 22 He is saying it's significantly higher which 23 indicates 5 to 5 and a quarter. He has also 24 been very clear about the need for the Fed to 25 leave rates on an elevated level for a long

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2	period of time. So again, it's hard to be
3	optimistic when you think the economy is going
4	to slow at some point, and again with the bond
5	markets spread, it may precipitate a recession
6	at some point which has an impact on earnings.
7	So I looked at the market reaction
8	yesterday with the NASDAQ up over 4 percent
9	and I think it's just early and I think the
10	market wants to rally. Some of it may be more
11	technically driven, but my expectations are
12	and my gut tells me 2023 is going to be a
13	little bit more challenging, certainly in the
14	first half of the year. As we get past the
15	Fed I think the Fed will be done hiking
16	rates by perhaps the first quarter depending
17	upon the data and see where that goes, the
18	impact on earnings, the multiples have come
19	down and compressed. I am more optimistic if
20	that's a better way to answer the question for
21	the second half of next year.

22 MR. BERGE: So it sounds like your view 23 it may be beyond the bearish side of things at 24 least in the short term. Does that at all 25 inform the activities that BAM will undertake

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2 in the short term, or is that just something 3 that, you know, do you take action on? MR. MEIER: We do at the margin. So 4 5 that's a great question. We have an asset 6 allocation given to us by the trustees that we adhere to. We are meant not to be nimble for 7 a reason. We are supposed to be long-term 8 9 investors. We are not supposed to overreact 10 to headlines although now that I say that, I 11 used the headlines in the presentation, but we 12 are supposed to be stable and consistent investors. But I will give an example of a 13 14 couple -- one of the deals we looked at for 15 OFI. Torchlight which we really like a lot, 16 and it's one of the reasons why I particularly 17 prefer them is because they are relatively 18 defensive and when they came and presented to 19 us, they told us what they are doing with 20 their portfolio that they are investing in 21 higher credit quality, shorter maturities, 22 higher in the cap structure relative to 23 another deal we looked at. When we went to 24 greenlight them at the investment committee, 25 we opted not to go forward because we thought

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2	they used too much leverage and it was too
3	aggressive for the environment. So yes, at
4	the deal level and management level we are
5	less aggressive.
6	MR. BERGE: Thank you very much.
7	MS. PENNY: Any other questions for
8	Steve? Okay. Hearing none, do I hear a
9	motion to go into executive session?
10	MR. BROWN: So moved.
11	MS. PENNY: Thank you, Mr. Brown. Do I
12	have a second?
13	MR. KAZANSKY: Second.
14	MS. PENNY: Thank you, Mr. Kazansky.
15	All those in favor, please say aye.
16	Aye.
17	MS. HIRSH: Aye.
18	MR. BUCKLEY: Aye.
19	MR. BERGE: Aye.
20	MR. KAZANSKY: Aye.
21	MR. BROWN: Aye.
22	MS. PENNY: Any opposed? Any
23	abstentions? Okay. We are going into
24	executive session.
25	(Discussion off the record.)

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2	MS. PENNY: Back into public session.
3	Ms. Stang, would you like to report out,
4	please?
5	MS. STANG: Certainly. In executive
6	session we received some preliminary
7	performance data. We received implementation
8	plans for two asset classes. Consensus was
9	reached on both. We discussed and received a
10	presentation about an investment policy issue.
11	We received presentations on three private
12	equity deals. Consensus was reached on one.
13	MS. PENNY: Thank you so much. Does
14	anyone have anything else for public? Hearing
15	none, do I hear a motion to adjourn?
16	MR. KAZANSKY: So moved.
17	MS. PENNY: Thank you, Mr. Kazansky. Do
18	I have a second?
19	MR. BROWN: Second.
20	MS. PENNY: All those in favor of
21	adjourning, please say aye.
22	Aye.
23	MS. HIRSH: Aye.
24	MR. BUCKLEY: Aye.
25	MR. BERGE: Aye.

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2	MR. KAZANSKY: Aye.
3	MR. BROWN: Aye.
4	MS. PENNY: Opposed? Okay. We stand
5	adjourned.
6	(Time noted: 1:37 p.m.)
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Proceedings CERTIFICATE STATE OF NEW YORK) : ss. COUNTY OF QUEENS) I, YAFFA KAPLAN, a Notary Public within and for the State of New York, do hereby certify that the foregoing record of proceedings is a full and correct transcript of the stenographic notes taken by me therein. IN WITNESS WHEREOF, I have hereunto set my hand this 13th day of December, 2022. YAFFA KAPLAN