CITY OF FORT PIERCE RETIREMENT AND BENEFIT SYSTEM

BOARD AGENDA

Retirement Board Regular Meeting - Thursday, May 18, 2023 - 2:00 p.m.
City Hall - City Commission Chambers, 100 North U.S. #1, Fort Pierce, Florida

1. **CALL TO ORDER**

2. **ROLL CALL**

3. **COMMENTS FROM THE PUBLIC** (limited to 4 minute duration)

4. **CONSIDERATION OF MINUTES**

5. **REPORT FROM BOARD ATTORNEY**

6. **PUBLIC HEARINGS ON BENEFIT APPLICATIONS**

   a. Request for Retirement from Carl Dougal with 6 years and 7 months of service with The City Of Fort Pierce

7. **OLD BUSINESS**

8. **NEW BUSINESS**

   a. Review of Performance Evaluation from Consultant- Callan Associates

   b. Report From Money Manager - Morgan Stanley

   c. Report From Money Manager - Causeway

   d. Report From Money Manager - Richmond Capital

   e. Report From Money Manager -William Blair

9. **CONSENT AGENDA**

10. **CONSIDERATION OF ABSENCES**

11. **BOARD MEMBERS COMMENTS**

12. **The next meeting is June 15, 2023 at 2:00 P.M. and will be held in the Commission Chambers, City Hall.**

13. **MISCELLANEOUS**

14. **ADJOURNMENT**

In accordance with the Americans With Disabilities Act of 1990, persons needing a special accommodation to participate in this proceeding should contact the Recording Secretary of the Retirement and Benefit System at the Finance Department of the City of Fort Pierce no later than three business days prior to the proceeding. Telephone (772) 467-3000 for assistance.

Any person seeking to appeal any decision by the Retirement Board with respect to any matter considered at this meeting is advised that a record of proceedings is required in any such appeal and that such person may need to insure that a verbatim record of the proceedings is made including the testimony and evidence upon which the appeal is to be based.

Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
CONSIDERATION OF MINUTES

Attachments

Minutes 042023

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/12/2023 08:42 AM
Final Approval Date: 05/12/2023

CITY OF FORT PIERCE RETIREMENT AND BENEFIT SYSYTEM
MINUTES OF MEETING HELD
April 20, 2023

Summarized Minutes of the regular meeting of the City of Fort Pierce Retirement and Benefit System April 20, 2023, 2:00 p.m., in the Commission Chambers at City Hall

Present:	
Barbara Mika	U.A. Board Appointed Member, Chair
Comm. Arnold Gaines	City Commission Member
Wendy Rydzewski	City of Fort Pierce General Member, Vice-Chair
Keith Stephens	U.A. General Member
Johnna Morris	Secretary/Treasurer
Kyle McCarthy	Police Officer Member
Guest by Conference Call:	
Attorney Jim Walker	Attorney for the Retirement Board, Advisory
Guest	
Paola Cardenales	Callan Consultant
Rick Ford	Callan Actuary
Absences:	
Comm. Michael Broderick	City Commission Member
Recording:	
Junelly Sebastiano	Executive Assistant to Director of Finance

ITEM NO. 1 & 2~ ROLL CALL

Mrs. Barbara Mika called the meeting to order at 2:00 pm on Thursday April 20, 2023, the first item on the agenda being the "Roll Call".

ITEM NO. 3 ~ COMMENTS FROM THE PUBLIC

Mrs. Mika said next, we will move on to comments from the public? Seeing no public, we will move on to the consideration of minutes.

ITEM NO. 4 ~ CONSIDERATION OF MINUTES

Mrs. Mika said consideration of minutes, any discussion?

A motion was made by Mrs. Wendy Rydzewski and seconded by Mrs. Johnna Morris. All those in favor of the motion signified by saying aye. There was no opposition, and the motion was carried unanimously.

ITEM NO. 5 ~ ATTORNEY'S REPORT

Mrs. Mika said, next, we move on to a report from the board attorney. Mr. Walker?

Mr. Jim Walker said thank you Madam chair, I am pleased to report that no specific legal concerns have been brought to my attention. Nevertheless, I would be delighted to entertain any questions or comments.

ITEM NO.6 ~ PUBLIC HEARING ON BENEFITS APPLICATIONS

Mrs. Mika said we'll move on to public hearings on benefit applications. We will open the public hearing for the request for Retirement from Frank Ferrick with 22 Years of service with the City of Fort Pierce entering DROP. Seeing no public, we will close the public hearing and open it for discussion.

A motion was made by Mrs. Morris and seconded by Mr. Keith Stephens. All those in favor of the motion signified by saying aye. There was no opposition, and the motion was carried unanimously.

Mrs. Mika said we will open the public hearing for the request for Deferred Retirement from Jessie Bernard Bryant with 7 years of service with the City of Fort Pierce. Seeing no public, we will close the public hearing and open it for discussion.

Mr. Walker said madame chair, are we going to be addressing James Ippolito?

Mrs. Morris said no Attorney Walker, he had requested that it be pulled. He is not going to defer his retirement.

A motion was made by Mrs. Morris and seconded by Mr. Kyle McCarthy All those in favor of the motion signified by saying aye. There was no opposition and the motion carried unanimously.

Mrs. Mika said we will open the public hearing for the Request for Deferred Retirement from Mark Duffany with 12 years and 2 months of service with the Fort Pierce Utility Authority. Seeing no public, we will close the public hearing and open it for discussion.

A motion was made by Mrs. Rydzewski and seconded by Mr. McCarthy. All those in favor of the motion signified by saying aye. There was no opposition, and the motion was carried unanimously.

Mrs. Mika said we will open the public hearing for the Request for Retirement from Tracy Telle with 18 years and 3 months of service with The City of Fort Pierce entering DROP. Seeing no public, we will close the public hearing and open it for discussion.

A motion was made by Mrs. Morris and seconded by Mr. Stephens All those in favor of the motion signified by saying aye. There was no opposition and the motion carried unanimously.

Mrs. Mika said we will open the public hearing for the Request for Retirement from Richard Peterson with 9 Years of Service with The Fort Pierce Utility Authority. Seeing no public, we will close the public hearing and open it for discussion.

A motion was made by Mr. Stephens and seconded by Mrs. Rydzewski All those in favor of the motion signified by saying aye. There was no opposition and the motion carried unanimously.

ITEM NO. 7 ~ OLD BUSINESS

None

ITEM NO. 8 ~ NEW BUSINESS

Mrs. Mika said next, we will move on to new business, we have our quarterly update from our consultants from Callan: Rick Ford and Paola Cardenales.

Mrs. Paola Cardenales said we didn't get a chance to meet in February due to some logistics, so we are providing you with an update as of December. It is a bit old, but I just handed you out an update for 03/31. Weston and I will be here again next month to give you a full detail of the most updated performance. A few months ago, we talked about the Asset Liability Study, we have included an additional document in the package. Rick is going to walk us through that, and then we are going to see the results specifically for your plan. Rick is one of our Actuaries at Callan, I am going to let him introduce himself.

Mr. Rick Ford said unlike Paula, I am not a field consultant. I work in our Capital Market Research Group, there are about 10 of us in the firm. We set our Capital Market assumptions and we do asset liability projections for defined benefit pension plans. Whether they be private or public we will help firms put together their asset allocation strategies. The last thing is called a Manager Structure, we will work with our manager research group to structure those managers in the right manner so that you have a well-balanced portfolio in the aggregate. I am referred to as a specialist, we like to see our clients do an Asset Liability Study every 3-5 years. Hopefully you will see me in another 3-5 years after we've done this. If any questions come up along the way or any other projects that require our group, I will most likely be the one that will work on it. I'll work side by side with Paola and Weston to make sure that any of the specific things with respect to the way you all operate that we make good consideration of that as we are doing our work.

Mrs. Cardenales said I am going to refer to the 4th quarter performance review, the executive summary. Last year we came and spoke to you about inflation, interest rate hikes, and the war in Ukraine. There was an additional topic at the end of the year, the opening of China. We talked a lot about China last year, seeing how it impacted your portfolio. We reassessed and had confidence that the emerging markets allocation that you have is appropriate and the exposure wouldn't have a major impact if something were to happen. That was a topic that came up last quarter and it is going to shape how international equity markets behave going forward. It is going to try to recreate some relationships that were blocked during COVID with China. There are also conversations about bringing back some of the production that has been done in China and offshore and bring it back to the United States. We are going to see changes with international markets in the next few years. The other topics that we had were the banking system, the FED keeps hiking rates. They increased the rates by 25 basis points. It was interesting because we met with a lot of your managers for another client and at that point the FED hadn't decided. They were saying that 'it would be a huge mistake if they do it', 'we don't know what is going to happen.' They ended up easing the number of increases that they were making, but it was something that the chair decided to do. It shows that they are willing to tackle inflation and we see the results and it seems that it is working but it is having other impacts, like the banking system. We talked about growth for the economy, the latest number that we have as of the 4th quarter was 2.7%. Weston and I came and talked about the first two quarters last year and it was negative growth for the US. The third quarter was positive, and we were talking about probable negative growth for the US in the 4th quarter. Surprisingly it came back positive, which is good news for everybody because everyone is worrying about having a recession. That doesn't mean that it is not going to happen, but it is good to see that the economy is still strong despite inflation and everything else that is happening on the macro side. Talking about inflation, the latest number that we have is 5% as of March. Last year, Weston and I kept talking about numbers at the 7-8% rate. It seems that the efforts from the FED are helping ease inflation concerns, however the labor market and consumer spending are still strong, so it's still a challenge. They are still trying to slow down inflation, but it is going to take a little bit longer. If we look at performance, the correlation between equity and fixed incomes was very high. When they moved down, all of them moved down. At the end of the year, if you look at the YTD number you are going to see double-digit negative results, with some exceptions. It was a tough year, however if we look at the results for the last quarter, we have seen a lot of positive results. We still see that correlation between equity and fixed incomes but they're going up again. The differences that we have seen are growth and value; the theme now is that growth is outpacing value, while at the end of last year, value was outpacing growth. Small caps outpaced large caps but at the beginning of the year, large caps outpaced small caps. It has been an interesting dynamic, but this is going to bring opportunities for your managers to find new stocks, new ways to add value and recover that money that they lost last year. That is on an absolute basis, if you look at your managers on a relative basis, they are performing as expected. Over the long term, they have been providing you with the results that you are hoping for. If you focus on the 4th quarter, it is going to be painful because it is a full year of performance that is impacting us in the long term. They are still

outperforming your benchmarks for the most part. It is something to keep in mind when Rick speaks, I know there are some topics that we wanted to address with the ALM, which is going to be the allocation to real estate, your allocation to fixed income or where to allocate more assets to get potentially more return. If we move to page 7, your assets as of the end of the year were at around $213 Million dollars, in March your assets went up to $223.7 Million dollars. It has been a strong quarter, it was interesting because we saw January being very strong, February posted negative returns for most of the asset classes that we saw, and March was a mix. Finally, once you look at the full quarter, we saw positive results for your managers and that is reflected in the market value that you will see next quarter. Moving on to the Total Fund Chart, the aggregate of all your managers weighted based on the policy that you have in place. You can see the results across different time periods. If we focus on the last quarter, the fund is going to be slightly underperforming. That was mainly driven by the allocation to real estate because real estate struggled during the last quarter, you were overweight. If you remember at the beginning of the year, it was a bright spot. As the other asset classes were struggling, the assets for those managers were declining but then the asset value for your real estate funds were increasing. When real estate declined during the last two quarters, that impacted your fund in a negative way. From an absolute perspective, it is still providing strong returns with a return for the quarter of 6.1%, but on a relative basis it is still lagging. However, if you compare yourself versus your peers, you are still above median for the quarter. If we look at the 10-year column, your fund is still lagging a little bit but very strong returns. Rick is going to talk about that 10-year plan rate and how your plan is expected to perform and if it is going to be able to provide you with the returns that you need to achieve the actuarial rate of return that you have set up for the plan. The total fund is not meeting expectations, CPI has been very high. When we have a CPI +10, over the three-year period, it is going to be very hard for the total fund to beat that benchmark. That doesn't mean that it is a concern, it is just a matter of relative performance and who has been impacting your return. It has been a tough market; it's been the worst 10 years for international markets that we have seen. We are expecting a reversal but in the meantime all those items have been hurting the performance of the total fund over the three-year period and long-term period. You have two objectives for each one of these managers. One is on the relative performance, relative to the benchmark and another one is relative to peers. The Russel 2000 Growth: last year it was very hard on growth stocks, they did a great job, and they met their objective for the rolling three-year period but when you look at the comparison versus the peers, they haven't met their objectives. If you focus on Emerald, and you look at their details they are providing very strong results for the long term. They protect the capital in the downside, even though they declined in performance they didn't lose as much money as your benchmark. When we have a market where growth is very strong like this first quarter, they are not going to capture the whole outperformance. If you look at the 03/31 data you will see that dynamic on a quarterly basis, nothing to be concerned about. Ceredex: similar story, it was a good year for value and the manager provided really good results at the end of the year. For the last quarter (4h quarter), they had a performance of 14.1% versus 8% from your index. If you look at the long term, they are outperforming significantly so they have been doing a great job for you. Last year there was a period

where they were struggling, they were very apologetic to the board. They knew they were positioning their portfolio in a way that would benefit you the second half of the year and they did. Those results speak for themselves, nothing to be concerned about. On the large cap and mid cap index; performing as expected and in line with the benchmark. Morgan Stanley: they have been struggling for a few years over the long term. Their story goes back to 2021-2022, their performance was very challenging. The stocks that they were picking were not providing the performance that you were expecting, but they were still doing what they were hired to do. We are not concerned about that, but we wanted to make sure that they would come back on their performance. They proved over the last quarter that they can keep adding value, this improvement has been impacting long term. The struggle that we had last year with international equities was that the dollar was very strong. When interest rates go up, then typically the dollar is going to be stronger. When you convert the return from international equities from their local currency into US dollars, the returns that we see are going to be hurt. A few weeks ago, we had our national conference in Arizona, one of the key things that we had was international equities. They have been struggling, it's been a very tough market for all of them. We have had clients ask if there is still a position for international equities within the portfolio if the US has been very strong. There is a lot of key things as I mentioned, China reopening, countries trying to diversity where they have their centers for distribution and onshoring into their countries and improving supply chain. Not only for the US but other countries in Europe and in Asia are going to provide opportunities for your managers to find stocks. We met with one manager, very small cap focused, and he said that they have been finding a lot of opportunities in Europe on small-cap companies. It is shown to be a key theme, we have the other aspect of maybe internationals will never recover, but I think that the conversations that we had is that there is an opportunity going forward. We are expecting all these managers to add value going forward. Whenever we meet with them, ask them "how are you positioning your portfolio to take advantage of the current situation in international markets?" No concerns, I know there is a lot of red with Morgan Stanley and Causeway but over the long term they are performing fine. They may be off by a couple basis points here and there, but in general there is no concerns with your international mangers. William Blair: we renegotiated some fees for them, and we completed the transition from the mutual fund to the CIT. Because of how markets behaved at the end of the 4th and 1st quarter, you were able to access and even lower share class than we had quoted initially. The final quote came at 69 basis points instead of 78, your original fee was 90 basis points. That is significant savings for the plans and when we did the math, it paid for the ALM that we did. They were a great team to work with, they did it very smoothly and worked with the Callan team to complete it on time. Richmond: we talked about them, and we even modified their goal last year. It is a very conservative portfolio on fixed income. It has been very hard for fixed income to add value over the last few years given where interest rates were. That theme has changed a little bit and you are going to see it again on the report that Rick has. Yields are higher, and they have opportunities to provide you with more income. That doesn't reflect the change on the pricing of the securities, but at least the yield that you are expecting to get is going to be a little higher. However, it is worth noting that since they are very conservative and core invested, they are going to have

treasuries and corporates, but everything is going to be above investment grade and very secure assets. If you look at other areas in the market; high yield, bank loans, and credit, they may add more value until we start seeing some defaults. In the meantime, we are expecting them to add additional value. When comparing to peers, Richmond is probably going to look less attractive because of the nature of the fund. That does not mean that they are not doing what they are hired to do. One of the options that we are going to talk about is, is it worth it for the board to look at a core+ option. Do we want to expand the universe for your fixed income manager, give them the opportunity to invest in below investment grade securities to get the potential of additional returns or is it something that you are not comfortable with. Heitman: your real estate fund, they had a period a few years ago where they were struggling significantly. They haven't been able to fully recover over the long term, however they have been doing a good job for your portfolio. Real estate: if you remember at the beginning of the year, it was a bright spot. In the 3rd and 4th quarter, real estate struggled because usually when you value properties, the impact of the economy takes a little bit to hit those securities. Now that we are in the 3rd and 4th quarter, the valuations of the buildings, storage units and student housing are coming down, so now they are being impacted in the results. We've had conversations with different asset managers, some of them say they are over that hump. We saw the 1st quarter still having some issues for some managers. Even for Heitman, they underperformed but that is still reflecting 12/31 valuation. We are hoping that the next several quarters we will see an adjustment. We still see that real state adds value, it is a good diversifier, and it adds value to your portfolio. We talked about reinvesting the dividends or taking them as a check and using them to invest somewhere else. Now with the results of the 4th and 1st quarter, your assets are down again within ranges. I think it is worth it to have real estate in the portfolio, but do we reduce, keep, or increase the allocation. We will talk more about it when Rick talks about the Asset Liability Study. Long story short, no concerns with your portfolio even as of 03/31, good results. Your managers have been able to recuperate some of the losses from last year. We will touch base with more details, next month.

Mr. Ford said let's flip to the Executive Summary. I want to make sure that you know that we went through your plan and analyzed a lot of stuff. We have concluded that you can stay where you are, your allocation is fine. Using our most recent capital market assumption over a 10-year period, we are expected to return to 6.9% and your discount rate is 7 ¼%. It is well within reason; your actuary will use a longer period. If we use our 20- or 30-year assumption we get 7.1-7.4%, everything is copacetic and right in line where it needs to be. What we did was collect all the information from your actuary and plan participants, we have them strip out all the personal information. We don't know names, socials, we just want male, female, age, expected benefit and that sort of stuff. We build out a liability model and the first thing that we do is make sure that we match what your actuary is saying. We never get it exactly right, but we go within 2% and then we scale everything so that it matches your actuarial report. Your actuary was a phenomenal partner, they got us all the information on time. They gave us some pointers on the nuances with respect to the drop and some other things. We think that you can stay where you are, and if you stay you have an option then to

take that 27% of fixed income and invest it on some additional asset classes. Primarily some higher yield and some bank loan type, basically moving just a little bit down on the credit scale. While that will increase your yield, it will also increase your risk of default but that is why you hire an active manager. Their job is to analyze those credits and make sure they are buying ones that are less likely to default than others. Then the other option would be to take 7% of your fixed income, move that back up into equities and take a higher risk position. At the end of the day, you put in contributions, they earn money, and they pay the benefit payments and the expenses of the trust. You are monitoring the expenses, moving to lower class vehicles and you are managing that part of it. Then the benefit is defined, there is a formula, you plug everybody's information in and out comes the number. Depending upon your date of hire and other things that is going to drive what your benefit is. Then there are some caps in there, I think one is capped at 75% of pay, the other one has a full cap at 100% based upon when you are hired, so we take all that stuff into account. We have the starting asset value that ties out to the most recent valuation, which was 09/30/22 and we had the assets. We knew the asset value, so we went ahead and just forced the model to land at that point and then we turned on the simulator and we allowed things to fluctuate. I am going to walk you through one trial, if everything comes through, which we know is not the case, but it will give you an idea of what life will look like. When we get to the end, we will see some charts with a bunch of dots on them. Those dots represent different portfolios, and we try to distil all your alternatives into one dot on a chart. The assets have been jumping around quite a bit. When we get in here and we look at what we project assets to be next year, its already off. I can tell you that, but all the differences, when we look at the portfolios, the Deltas will move in tandem. We want to have an idea what the range of results could be over time. You're already trending in the right direction. Is the funded ratio going up over time, if it's flat, and if it's going down, what's causing that? Do we need to do anything, do we need to fix anything? Nothing here needs to be fixed, the funded ratio is trending level and then taking off over time. We are projecting off the lowest point that we could Jump off because of the way the markets were in the starting point of the valuations. You start at 9/30 because Florida tells you you're starting at 9/30, right? So that's where your valuations are.

Mrs. Cardenales said this ties into what we see every quarter. Rick is going to talk about the range of potential outcomes, Weston and I talked, this is probably not the worst outcome that we projected when we ran that analysis several years ago. Be patient with what you've done with your asset allocation. It is providing to pay for benefit payments and to keep a funded status that's reasonable. This is how it ties into what we talk about every quarter. We model from the best case to the worst-case scenario and none of what we saw last year was the worst-case scenario that was modeled. Even though it was tough, it wasn't the worst-case scenario. Keeping that long term view, that's what's brought us where we are, but this is where the results for the next 10 years will make sense.

Mr. Ford said Paula, Weston, your actuary when they come in, they're looking in the rearview mirror to tell you what has happened. We're trying to get a good look into the

future just to make sure you're on the right path. Let's talk about what we are here for, there are multiple things that are going to affect how the plan operates. The money that goes in, you put in about $6 million and the employees put in about another $2 million. You have the benefits policy, so it's 3% of your final average pay. Then there's some caps on there, you've got a drop, right? We've modeled some of that, people are going to leave the system, we kept the active population level at 555 people. We looked back and said, 'here's kind of what the new hires look like', so we made-up a person and they magically entered the system as people left. Then, the investment policy, that's what we're here to talk about and that's the one thing that we can control. How can we change that investment policy and how does it change the future funded ratio, the market value of assets and all that sort of stuff? We are in a very interesting point within the capital markets, the yield curve is what's called inverted. Which means you can earn a higher rate holding a three-month T bill than you can holding a 30-year bond, that doesn't make a whole lot of sense. When we do our assumptions, we start with whatever the yield curve is as of 9/30. Then we say, what do we think it's going to look like long term? Those two lines on that chart represent where we are today and where we think the world is going to look like 10 years from now. The good news is the fixed income that you're going to be invested in, is already equilibrium so it's priced out properly or you should get some capital appreciation as rates come down and the yield curve goes back to normal. You paid for that last year when rates went up, so you're going to get some of that back when rates eventually go back to normal. That's our starting point, we start with an inflation of 250, our cash assumption is 275, which is up from almost zero this time last year. For our fixed income, were thinking it's going to be around 425, which is up from 1.75. What that means is fixed income is now an investable asset, it is a viable investment. You're getting some return over, so that that big loss that you took in last year, you're getting that back now because you're earning 3% more than you would normally. Our equities on the next page, we think you're going to earn about 7-725 and so that's up 50 basis points from last year. We increased our inflation assumption by .25% and then we thought that the equity market was overvalued last year, now that we've had seen the correction, we've raised our assumption by another 25 basis points. We went from 675 to 725. Those are the assumptions going into our model, plus the real estate assumption, that's where the 6.9 expected return on your portfolio comes from, a blend of those 3 assets classes. The risk of your portfolio in isolation doesn't mean anything, it's when you compare it to the alternative portfolios. Page 133, that's the starting point of our analysis. We'll show you the three-year historical comparison of all your start of the assets, the liability, and the funded status. Let's start with the actual accrued liability, it started at 239.8 and as of 9/30/22 our estimate is 267.1. When Brad comes back in here and he's collected all the data, I'll tell you exactly what that number is. This is a predictable number, so we just use the standard actual process to roll everything forward. That means if you had $267 million, you would have enough money to pay off all the participants, if that money earned 7.25% every year here on out, you'd be able to pay all the benefits and not worry anything else. The market value of assets, that's the value in the trust. The actuarial value of assets, that's a smooth value. I want you to look and see what happened to the market value of assets last year, it went from $246 down to $201. You lost $45 million, but the actual value of assets stayed basically flat. What's going on

there? Well, the actuary takes that loss, and he defers that over a four-year period. When you have gains above the seven and ¼, he brings the gains in over as well. That actual value of assets is going to be a relatively stable number and it's designed to be that way. The actual math is designed for the plans to be funded as a level percentage of pay every year, and this is a lot of smoothing to take out all that little market volatility, if you will. The unfunded liability is the difference between your actuarial value of assets in your accrued liability So it's going to be a little smooth out over time. You're $40 million short as of right now, no big deal, everybody is short especially in most public plans or they have an unfunded and that's OK. There are various ways to attack that, some people set up dedicated smoothing bases or amortization bases and things like that. You're using the entry age normal method, which is the most common method. It gets blended in, and they come out with a number, and this is the percentage you pay. Then we have two funded ratios, the actuarial value, and the market value. The actuarial value is the actuarial value of assets with the accrued liability. The market value funded ratio is going to move a lot more than the actuarial value, we're going to show you both of those. If you want a real time measure, I will say use the market value. If you want to say, 'what's my actuary going to talk about', that's the actuarial value funded ratio. Our assumptions are on the right-hand page, we assume 6.9%, your actuary says 7 and 1/4. I can tell you that we're both wrong, but these are two reasonable aspects and what this tells me is that we are in the ballpark, which is good. Our inflation assumptions are off by 25 basis points, no issues there. All that means is when he's doing his projections, he's going to inflate your salaries at 7 and ¼. Then, when he takes the cost and divides it by your payroll, it's going to be divided by an inflation number of 275 and not 2.5. We have a chart in here, I'll show you a comparison of the results under the different assumptions. So now on page 134, the stacked bars represent the number of people. The blue is the 555 people and as those people exit the system and go into inactive or retiree status, they go into the gray bar. The gray bars are slightly trending up over time, and that's what happens typically. Your employee headcount is going to be what it is, we just made the simple assumption to keep it flat. Then, the average age of your population is represented by the line to the right access, that's trending up overtime. What's driving this is our new entrant assumption, we're assuming that the new entrance is older age than right now. Next, the accrued liability: the blue bar, that is what you owe, that's the present value of all the benefits that are owed. The lines at the bottom, that's a projection of the assets. The yellow line is your actuarial value of assets higher than the market value. That's because last year's losses are being deferred in. Now they converge in four years because this is assuming that you earned 7.25 every year, these are your actuary's assumptions. The market near actuarial value of assets converge to each other after four years because there's no gains or losses to smooth. Now on the next page, we're going to set the assets on top of the liability and we're going to come up with a with a funded ratio line. On page 136, this is on your actuarial value of assets basis. If you see the line, it goes down, kind of bottoms out in four years and then it starts to come back up and it ends up basically where it started in 20 years. The decline in the line, is those losses being recognized into the system over time. We're going to show you a chart of the market value funded ratio and it starts off much lower and follows the same pattern up. The assets are represented by the blue bar and the gray is your liability.

Your unfunded liability is represented by the chart right below. It represents the space between your assets and your liability. The good news is that as those deferred losses come in, the unfunded goes up and then your unfunded starts going back down, which means the math is working. You're earning enough to cut into that unfunded liability every year and that's why your overall funded ratio is going back up over time. All good things, we would love to see this. We have some public plans where the line just goes down and it continues to go down. That's because they're not putting in more money into the plan and it's just bottoming out. You typically see in that situation where the math works, the contributions requirements are getting very, very large, and that's what's propping it up. We're not seeing that here, the contributions that you're putting in are working perfectly. On page 137, what I did here is I took the contributions, and I broke them down into the cost that occurs every year, that 3% of pay that goes in, and then what's going to pay the unfunded. So, if you think about your mortgage and you got a principal payment and you got interest, right? If you bring in those two components, what you're doing as you're prepaying your mortgage, you're prepaying that unfunded liability down, which is good. We would like to see that the contributions are covering some of that unfunded and that's why their funding is going down overtime. Page 138 is going to be where we compare the actuarial value and the Market funded status. The market funded line is the lower line, we see that drop down. That's the difference between immediately recognizing last years' experience versus deferring it out. The assets and liabilities here, the unfunded is the exact same. The only difference is in those first four years. That's because we're assuming 725 every year, when we start letting things vary, the markets going to swing like this and the actuarial is going to be much tighter. The trust is here to pay benefit payments, about 8% of the assets are going out every year, your only earning 6.9%. It's not a problem for a couple of reasons. One is you're putting about 4% into the plan every year, so you're having to sell about 4% of the trust every year to pay for the benefit payments, but you've already put money in for that. This is not uncommon, all that means is that you have outflow. When Paula and Weston come in here on quarterly basis and talk to you about a manager that is above their target, that may be a place where you want to go take money from them to go to pay the benefits.

Mrs. Cardenales said when we talk, and you see a big outflow on that asset allocation page, that's typically where we work with Johnna to pull the assets from.

Mr. Ford said on page 140, this is where we look at the Callan and GRS assumptions side by side, and then we take the most conservative of both and we end up with two lines on the chart for the market funded ratio. We had the big drop in 2022, then if we draw a line on 2032, which is our ten-year forecast, there is about a 2% difference. Again, 6.9% versus 7.2% is not going to make a material difference over the forecast period. It does build out when we look at the next 20 years. Hopefully you'll see me a couple of times before then, and we'll monitor this as it goes through time. So that is 3 simulations, the main one that we looked at where all the assumptions from GRS came true. The news is good, the unfunded liability is going down, the funded ratio is going up. So now let's run 2000 of those, let's let the assets do well, Let's let it do poorly and then let's band everything into a range of results. What we're going to do is we'll take

the existing policy that you have and we're going to run that through. We're going to say, 'this is what life is going to look like if you don't do anything', and then the next step will be 'let's look at some portfolios to see If we can make things better'. Flip down to page 143, that's what we call a floating bar chart, and I'm embarrassed to say that the description is wrong, but just go with me here. The top end of the charts is usually good, that's a one in 40 event. The bottom charts, where it's red, are the bad things and we have it color-coded. If reds are on top, that means red is bad and, in the middle, that's the median. Our middle results should tie back loosely to what we just looked at. The first thing we do, on page 144, is project out the assets. First Year's wide, anywhere between plus 35 to minus 16.2 and that middle result of 7.2. 'Hold on. You told me it's 6.9%, I'm confused'. Part of this is modeling 2 different systems but this is just the wide range that you can get in any one single year, and this is a one-year return. All our assumptions are over a 10-year period. When you start linking things up (a good year, a bad year, good year, bad, bad) the fan will start to get smaller. All these returns are linked over time, that's what your distribution could look like over a 10-year period. But in any one year, the return could be as wide as that under year one, and our median is 6.9%. What's going on there, well, you have $500, and you earn 50% in the first year, you have $150 then you lose 50% the next, you're at $75. You lost about 12%, that's what happens when you start linking stuff up. That is why the median is trickling down a little bit over time, those things being linked up together. We will look at the assets projected out over time. Why is it that that bottom red doesn't really seem to drop off, that's because when things go poorly you put a little bit more money into the plan. There's some support there, you have assets plus some contributions holding that up and we'll look at the contributions a few pages from now. The assets are only projected to grow at about 2.3% a year, that is because you're putting the 6.9%, you're pulling about 4% out every year. The assets are going to steadily grow a little bit over time around 2.3%. Then when we look at the next page at the actuarial value of assets, we're starting at that much higher base, and it trends down and comes back. Our actual value of assets is only going to grow 1.1% because we've got those deferred losses that are coming in. Then we will look at page 147, that's the liability. The liability has a much smaller distribution on the assets and that's because your actuary is using a discount rate of 7.25% across the board. Next time he comes he's going to talk about this thing called ASOP 4, Actual standards of practice #4, which is going to require him to disclose to you a different liability number that's going to move around. I'll let him talk to you about that, but for now, what you need to focus on is this liability of 7.25%. We take those assets; we lay it over the liability, and we get our funded ratios again. We look at the market funded ratio on page 148, We drew a line at 100% funded, and what this shows us is that over the next 10 years, you are most likely not going to be 100% funded. Unless you have good asset performance like in that top 25%. Now the good news is that the assets I've shown you here are lower than what she just said because we were projecting off the very bottom right. There's some conservatism built in here, but I would say don't expect to wake up and be 100% funded relatively soon, but you're trending in the right direction, and there's a chance. On the actual real value, much lower because we're trending down over time and in those up markets, the actuarial value of assets is not collecting all those gains. It continues to defer them, so it's a smaller value, but it's not as bad on the

downside, and that's where you want it, because on the downside, contributions don't go negative. It is giving you that protection in down markets. On page 150 with, this is distribution of the difference between the actuarial value of assets and your accrued liability, it's trending down to the median over time, it's going up over the four years and then it's trending down, which is wonderful. The next page is the distribution of the potential contributions based on your existing contribution policy. It gets rather wide there by the by the 10th year anywhere from 5 to $20 million. On Page 152 is the accumulated employer contributions, we just add up all the contributions that are going in by trial, rank them and sort them. About $108 million, is your best guess of what's going to go into the plan for the next 10 years. We've developed this thing called the ultimate net cost, which is how much you put in versus what's still the unfunded position in dollars. We add that up, we take it back to time zero, we say 'this is kind of the ultimate cost of this plan over the next 10 years. Here's where your existing policy is, can we find something that's less expensive and has lower risk'. Typically, if you lower it, you may have to take on a little bit more risk and that's where the tradeoff comes in. That is if we do nothing, world looks good, so everyone should be silently patting themselves on the back. On page 154 are some alternatives that we wanted to consider. We're going to call it FI 27 because that's 27% in fixed income, the first thing we want to do was to take the real estate out. Let's show you the value of the real estate, and when we look at our points, the real estate point is going to be suboptimal to the other ones that we look at. Real estate adds value over the 10-year period. We want to make sure that you understand that it's there because it's adding value .FI 35 is 35% in fixed income, so we're adding more to fixed income, taking away some equity risk. Then F I-20, we're going to move more into equity. So, we're going to reduce the amount of fixed income. Then the FI 20 RE plus, that's where we're going to amp up your real estate a little bit more. The last one is a policy core plus, that's where we take your existing portfolio, do nothing to it except for fixed income and we add in some lower quality type securities that will enhance the yield to hopefully some marginal risk well. The mathematical statistics are on the table below that the two that we really want to focus on are the what's called FI 20, and the policy plus core which are the last one on the far right and two over from that. We don't think that you need to take on less risk at this point from a return standpoint, but we showed the FI 35 so you could see what the goal posts would be. The rest of these charts are going to be a certain metric at a certain time, and there could be some dispersion with them, but nothing magical because we're not looking at making major changes here because nothing is broken. On page 155, this is what the one-year return distribution looks like for any of the policies. FI 35 is the one that's the tightest which you would expect because it has the least amount in equity, it's the lowest risk portfolio for the lowest distribution of results. We look at 20, it's the lightest and when we look at the policy versus the core, your core plus is a little bit tighter distribution and essentially the same return 7.2%-7.3%. Those additional asset classes, although that adding more risk, they are enhancing the yield and making the distribution tighter. Same thing over a 10-year projection and then we will look at the assets on page 157. The line there represents the liability in the 10th year, the projected liability and so again about a one in four chance that the assets will be above that liability. Your policy plus core and your I-20 are going to have higher medians than where you are now. The median result is $253

million for the policy for FI 27. For FI 20 it's $259 and $256 for your policy plus core. A slight improvement there with a little bit of extra risk, But the same downside. Now when we look at the market funded status, it says taking the assets of the liabilities, same result here. Your policy plus core gives you a slightly better median, 1% above, but a higher probability that you'll be over 100%. 21% versus 19% for the policy in the F I-20 is almost 23%, the best out there. On page 160, our ultimate net cost. it's what you put in and then we look at what's the unfunded status in dollar terms. We add those two together and then we take it back to present value, back to time 0. When we look at your policy, we take the middle point of $98 million and the worst case of $165 and on the next page we plot that into an XY framework. On page 161, we have a line here, this is called the zero line that runs from 100% fixed income all the way to 100% equity with the dots representing 10% equity allocation. This is where you are sitting, on this curve. We want to move in this direction, so this dot here is not on the curve, that's your no real estate dot. That's why you want real estate because you can get the same return or risk, by just moving one way. The real estate is not on the curve, simply by adding real estate, you can either reduce your risk or increase your return. That's the no brainer, that's why real estate is in there right now. If we were to add other asset classes, we could push this out as well, but we talked about that already. It becomes a risk-return tradeoff, all these things are efficient within each other, so whether you go to FI-20 or go to the core plus, the risk that you're taking is commensurate with the reward you're getting. It's an equal trade off, if you will, from the standpoint of your pension results. I don't want to say that I'm indifferent between FI, 20 or moving to core plus, right, but. You can go with both of those, whichever you decide or if you decide to stay the same. This analysis shows me that you're fine, there's nothing broken here. When there's nothing broken, it makes my job somewhat difficult because I'd like to come in and be able to show this chart and say you're here and all you must do is do this or that. That's a testament to what you're doing, what your actuary is doing, what you all are doing. Nothing is broken because of all of you. We looked at this chart a couple of different ways, what we see is that moving to the core plus does provide some increases in reward with very slight increase in risk. If you're going to stay at 27%, you should consider adding the plus sector. If you go to more equities, leave your fixed income the same because at 20%, the amount of the plus that you're going to add just isn't worth it.

Mrs. Cardenales said you don't have to decide right now. I know there's a lot of information there. Take some time to review it, if you have questions, send them to Johnna and we'll either address them next month or respond over e-mail. To add a little bit to what Rick was saying, if we look at that page 165, we talked about FI 20, adding to equities. If we think from an implementation perspective and decided to add more to equities, you already have your existing managers in place, it would be just a rebalancing exercise. How do we transfer these assets and just add to equities and reduce the fixed income exposure. If we think about the core plus option, Richmond, which you've been a client of for several years, they don't offer a core plus option. The beauty of core plus is that you can either keep your core and hire high yield manager and the bank loans manager. That adds to your work of interviewing more managers and adds more to thing that probably you don't want to do because you have other more

important things to be doing. There are other managers that do a core plus option, but that would imply for you to do a manager search, find a new provider, maybe getting rid of Richmond, or maybe reducing the allocation and just adding that core plus piece. There are a few things to consider from an implementation perspective that if you decide to make a change there's some work to be done. if you decide to stay where you are, it's an easy decision, but as Rick said, it's not necessarily that the current structure is broken, and you all have been doing a great job. The job from everybody who's been participating in this in this board has been great. If you compare the results that we have for the last 10 years, this is kind of what you're seeing. I know it's a future forward-looking instead of backward looking, but still the results from the asset liability are pretty good when you look at the average results. It's not perfect, but It's it gives you an idea of how it's going to look like in the future, but it's just something for you all to consider what you want to do if you want to increase risk, take advantage of yields going up, getting additional risk when it's a good time to do it or you can just stay where you are. We will talk about it more next quarter, if you find anything that would be helpful for us to bring, that will make your decision easier, let us know we'll include it in our presentation. If we need to bring Rick back, we'll bring him back or we can dial him in. I think the only public service announcement that I have is we have our Callan college educational sessions. There's one coming up in May, I'll send the invitation around if you want to join, it's just two hours.

Mrs. Morris said quick question, just for clarity, Rick, I'm looking over our summary and our policy and the policy core plus is so close. Looking at the 10-year assumptions to the 30-year assumptions, they're almost mirroring each other with like a .1% of difference. Taking that into account, if the assumption is not going to change that much, what's the point to change it?

Mr. Ford said the reason you might want to consider this is, so that when they come in every quarter you have two more asset classes that are working to provide you with uncorrelated benefits. You have two more managers that should not act exactly like your manager that you have with respect to fixed income. A little bit more diversity and over a 10-year period, the impact would probably be immaterial, but it should make the ride a little bit smoother.

Mrs. Cardenales said if you consider these results, these are not accounting for active management. These are based on just assumptions for your indices. You hired all your managers except for SGA, their active managers, their job is to produce more return. So even if the difference here may be minimal, you are paying them to add more alpha to the standard return. That's the other consideration of adding some diversification.

ITEM NO. 9 ~ CONSENT AGENDA

Mrs. Mika said next, we will move on to the consent agenda.

A motion was made by Mrs. Morris and seconded by Mr. Stephens All those in favor of the motion signified by saying aye. There was no opposition, and the motion was carried unanimously.

ITEM NO. 10 ~ CONSIDERATION OF ABSENCES

Mrs. Mika said next, consideration of absences.

Mrs. Morris said Commissioner Broderick made us aware that he would not be in attendance today.

A motion was made by Mrs. Morris and seconded by Mrs. Rydzewski All those in favor of the motion signified by saying aye. There was no opposition, and the motion was carried unanimously.

ITEM NO. 11 ~ BOARD MEMBER COMMENTS

Mrs. Mika said are there any board member comments?

Comm. Arnold Gaines said madam Chair, I just want to let you know why I was tardy. Fort Pierce had senior signing day for students that are going off to college and I had four kids that I coach and mentor that I wanted to be there for.

Mrs. Morris said Anna sent an e-mail out for anybody that wants to attend the FP PTA conference. It's not the school, but it's the conference that's in Orlando next month. She did send it out with the date that she needs to be notified by so that she can make the arrangements.

Comm. Gaines said I'll make myself available to go and I'll bring back a report and then we can go from there next year.

ITEM NO. 13 ~ ADJOURMENT

Seeing that there were no further questions or comments. Mrs. Mika adjourned the meeting at 3.33 pm.

ATTEST:

_____ _____

Secretary/Treasurer Chairperson

CITY OF FORT PIERCE RETIREMENT AND BENEFIT SYSYTEM
MINUTES OF MEETING HELD
April 20, 2023

Note: These minutes are not verbatim, only important issues and motions are reproduced in writing for the benefit of the Fort Pierce Retirement and Benefit System members. The recording itself is the official record for the meeting. The meeting tape/cd is available.

Retirement Board

Meeting Date: 05/18/2023

Re:

Information

SUBJECT:

Request for Retirement from Carl Dougal with 6 years and 7 months of service with The City Of Fort Pierce

Attachments

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:41 PM

Final Approval Date: 05/10/2023

Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
Review of Performance Evaluation from Consultant- Callan Associates

Attachments

Report From Callan

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/12/2023 08:39 AM
Final Approval Date: 05/12/2023

Callan

May 18, 2023

City of Fort Pierce

First Quarter Performance Review

Weston Lewis, CFA
Atlanta Fund Sponsor Consulting

Paola J. Cardenales, MBA
Atlanta Fund Sponsor Consulting

Agenda

2023 Capital Markets Assumptions and Asset Liability Modelling Results (action may be required).....3

Market Environment Update.....10

Asset Allocation and Performance Review.....12

Appendix.....15

Callan

2023 Capital Markets Assumptions and Asset-Liability Modeling Results

Why Conduct an Asset and Liability Study?

- The cornerstone of a prudent process for pension plan trustees is a careful and thorough examination of their long-term strategic plan
- Explicitly acknowledge change and uncertainty in the capital markets
- Establish reasonable rate-of-return and risk expectations
- Incorporate material changes in strategic plan policies and demographics
  - *Funding policy, benefit formula, eligibility, early retirement, decrement tables*
- Reflect changes in regulations
  - *Public pension: GASB 67 and 68*
- Project and evaluate impact on assets, liabilities, and funded status
- Confirm an investment policy to meet return and risk objectives in relation to funding, accounting, and policy goals
- If no material changes have occurred, an asset allocation review should still be conducted every 3 – 5 years

The purpose of this project is to determine the appropriate asset allocation

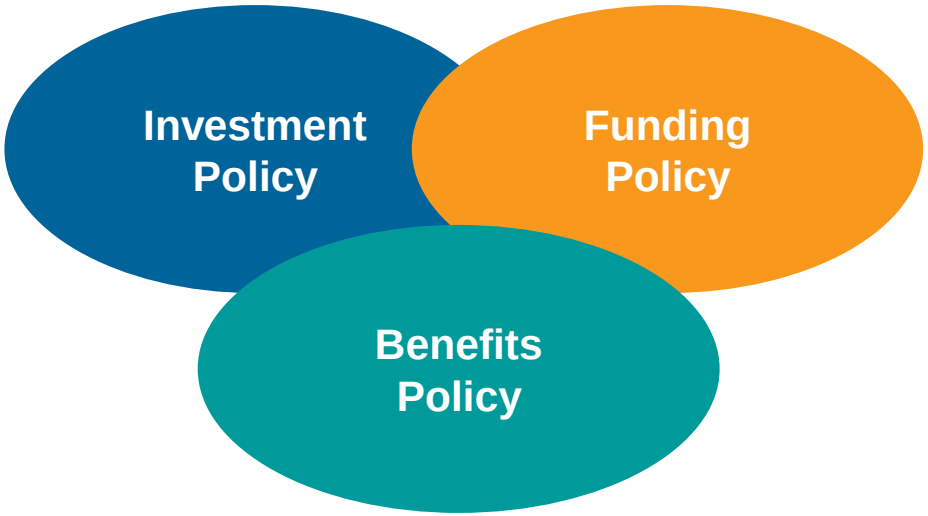
Executive Summary

- Our model starts at 9/30/2022 using actual assets and an estimated Accrued Actuarial Liability that reflects a CPI increase of ~7.75% for fiscal year end 2022. Despite the asset price decline since 9/30/2021, the System is projected to remain in an acceptable financial position as measured by both Actuarial and Market Value Funded Status
  - Estimated Actuarial Value of Assets / Actuarial Liability = 85% as of 9/30/2022
  - Estimated Market Value of Assets / Actuarial Liability = 75% as of 9/30/2022
- Using Callan's preliminary 2023 10-year Capital Market Assumptions, the policy portfolio is projected to return 6.9% annualized over the next 10 years
  - The 7.25% actuarial discount rate used by your actuary is usually based on a longer time period
  - Using Callan's 20-and 30-year return assumptions the policy portfolio is projected to return 7.1% and 7.4%, respectively
- The current asset allocation maintains a capital appreciation orientation by holding more higher return/risk assets than fixed income or absolute return. The target portfolio has 27% of its assets in fixed income. This risk posture remains reasonable and appropriate given expected future growth in liabilities and your long-term horizon
  - Modest changes to the current target portfolio, and their tradeoffs, are worthy of consideration
- Our analysis shows that liquidity needs are manageable

The focus for today is on Investment Policy

Evaluate the interaction of three key policies to identify an appropriate investment policy

Investment Policy
- 63% Equity
- 10% Real Estate
- 27% Fixed Income

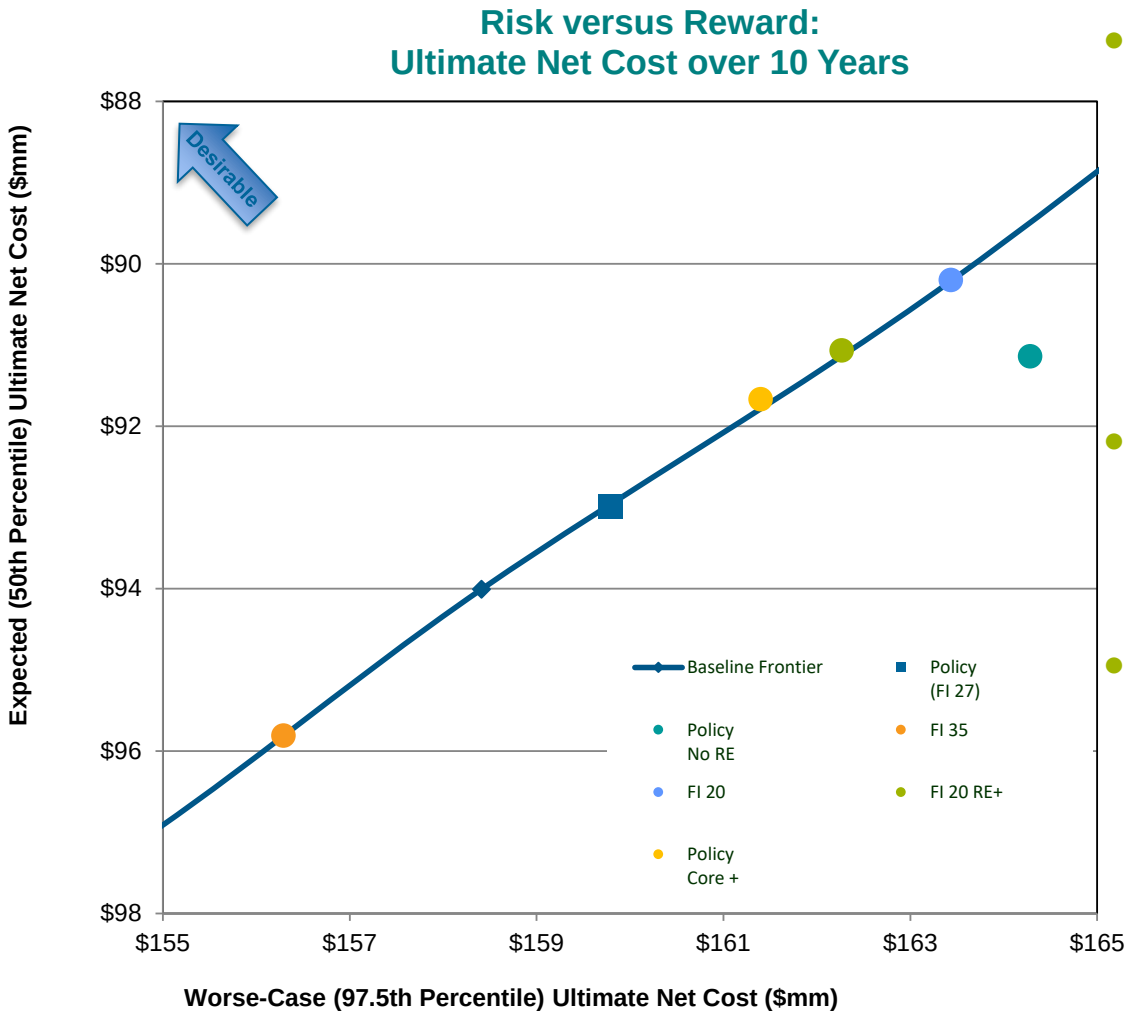


Funding Policy
- Employer contributions of $6m+ per year trending higher over the forecast period
- Mandated Employee contributions
  - 5.16% General and Police
  - 6.16% FPUA
  - $2m trending higher as wages rise

Benefits Policy
- Total Service times 3.0% of Final Avg Salary
- Benefit is capped at 100% or 75% of pay depending upon hire date
- Benefit pmts of $17m per year trending higher

Contributions + Investment Earnings = Benefits Paid + Expenses

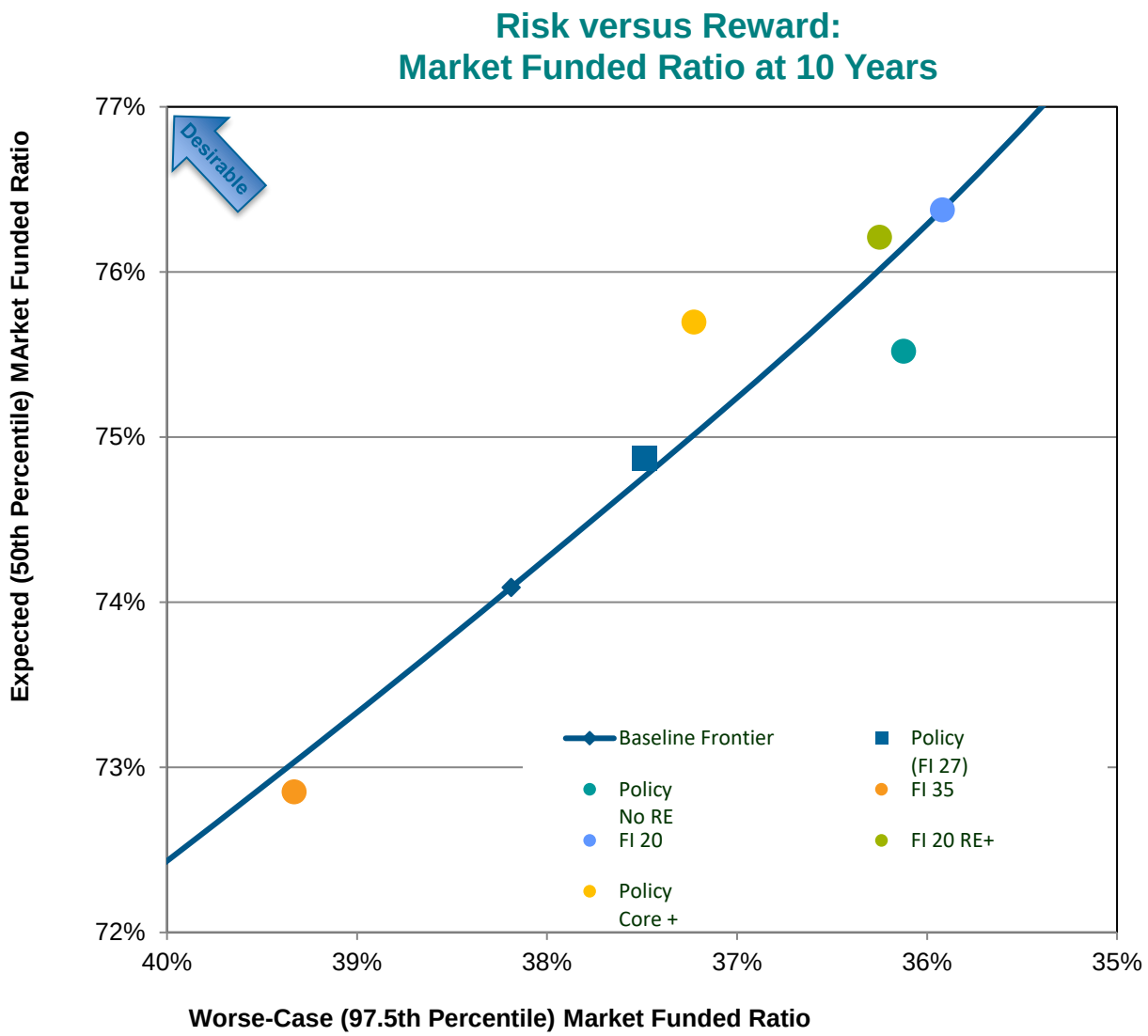
Ultimate Net Cost ($M): 10 Years



- Ultimate Net Cost (UNC) =
  - 10-year cumulative contributions (i.e., what you pay in)

    plus
  - 1/1/2033 Unfunded Liability (i.e., what you owe at the end)
  - Think of it as what you paid over 10 years + what you owe at the end of 10 years
- The Target Policy mix as well as the other mixes are modeled and optimized based on Callan's 10-year capital market expectations
- The chart illustrates the value of investing in alternative investments.
  - The green line represents investing in public markets only while the orange line represents results when including alternatives
  - For any point along the green line, there is a mix using alternative investments (the orange line) that has higher return and lower risk

Market Value Funded Ratio: 10 Years



- Not having an allocation to Real Estate is suboptimal

Summary

	Policy Targets to Consider		
Asset Class	**Policy (FI 27)**	**FI 20**	**Policy: Core +**
Broad US Equity	38.0%	41.4%	38.0%
Developed x-US Equity	25.0%	27.6%	25.0%
Core Real Estate	10.0%	11.0%	10.0%
Core Fixed Income	27.0%	20.0%	27.0%
Total	**100%**	**100%**	**100%**
Arithmetic Return	7.5%	7.9%	7.7%
Geometric Return - 10 Year Assumptions	6.9%	7.0%	6.9%
Standard Deviation	12.3%	13.5%	12.8%
Sharpe Ratio	33.3%	31.7%	32.7%
Geometric Return - 10 Year Assumptions	6.9%	7.0%	6.9%
Geometric Return - 20 Year Assumptions	7.2%	7.3%	7.2%
Geometric Return - 30 Year Assumptions	7.4%	7.6%	7.5%

- Leaving the policy targets unchanged is appropriate
- The current target, with 27% in fixed income, remains reasonable and appropriate given the plan's expected future growth in liabilities, however increasing the amount to equities and real estate (above existing policy targets) would be acceptable
- If no change is made to the allocation in fixed income, investigating the appropriateness of changing the fixed income from "Core" to "Core Plus" would also be acceptable

Callan

Market Environment Update

Equity and Fixed Income Markets Up in 1Q 2023

Key Themes: Regional Bank Fears, Intra-Quarter Volatility & Slower Fed Tightening

Higher rates impacting longer-term balance sheet holdings for some banks

- Nine consecutive rate hikes took the Fed Funds rate from roughly 0% to 5% in one year's time.
- Higher rates are a welcome outcome for fixed income investors but may tighten lending.
- CPI-U 5% YoY for 1Q, down from 6.5% on 4Q
- GDP Advance Estimate for 1Q 2023 was 1.1%

U.S. and Global equities positive returns in 1Q but it was not smooth sailing

- Growth stocks trounced value for the quarter, due largely to the sharp outperformance of Technology relative to Financials
- Small caps underperformed mid and large cap stocks
- Small value was the one index to post negative returns (Russell 2000 Value -0.7%), hurt by its exposure to smaller banks.

Fixed income recovered as high inflation began to ease, leading to speculation about interest rates

- Bloomberg Aggregate: Up 3% for the quarter
- The yield curve remained inverted as of quarter-end

Returns for Periods ended 3/31/23

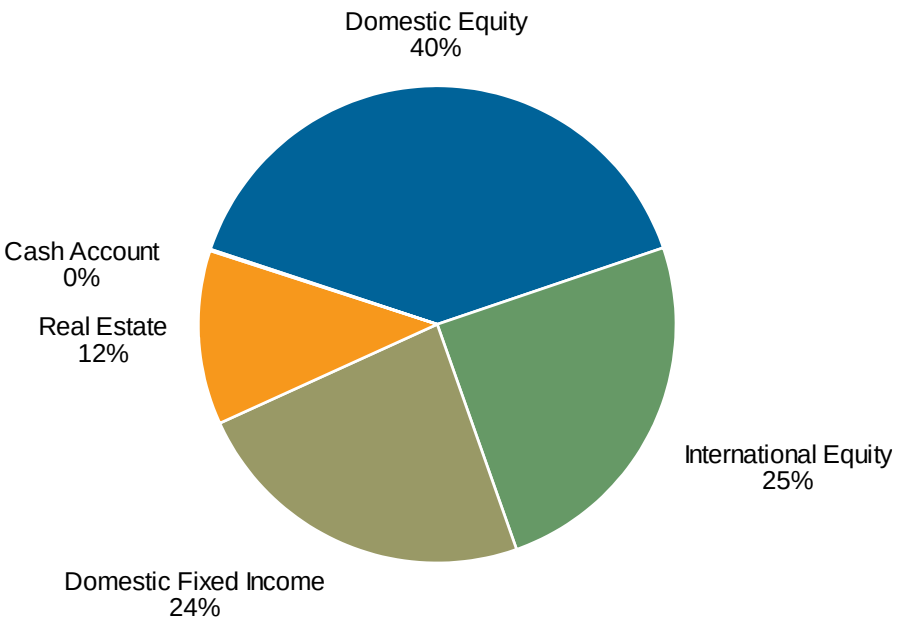
	Quarter	Year to Date	1 Year	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	7.18	7.18	-8.58	10.45	11.73	7.45
S&P 500	7.50	7.50	-7.73	11.19	12.24	7.39
Russell 2000	2.74	2.74	-11.61	4.71	8.04	6.84
Global ex-U.S. Equity						
MSCI World ex USA	8.02	8.02	-2.74	3.80	4.91	4.39
MSCI Emerging Markets	3.96	3.96	-10.70	-0.91	2.00	--
MSCI ACWI ex USA Small Cap	4.70	4.70	-10.37	1.67	5.06	6.45
Fixed Income						
Bloomberg Aggregate	2.96	2.96	-4.78	0.91	1.36	4.03
90-day T-Bill	1.07	1.07	2.50	1.41	0.87	1.90
Bloomberg Long Gov/Credit	5.76	5.76	-13.40	0.63	2.35	5.56
Bloomberg Global Agg ex-US	3.06	3.06	-10.72	-3.17	-0.99	2.80
Real Estate						
NCREIF Property	-1.81	-1.81	-1.63	6.71	8.34	8.79
FTSE Nareit Equity	2.68	2.68	-19.22	6.02	5.97	8.01
Alternatives						
CS Hedge Fund Index	0.92	0.92	1.06	4.25	4.24	5.81
Cambridge Private Equity*	-1.84	-1.84	-3.77	16.84	15.31	14.31
Bloomberg Commodity	-5.36	-5.36	-12.49	5.36	-1.72	1.80
Gold Spot Price	8.76	8.76	1.65	8.40	2.21	7.81
Inflation - CPI-U	1.70	1.70	4.98	3.88	2.63	2.51

*Cambridge PE data as of 3Q22 and CS Hedge fund data as of 4Q22.
Sources: Bloomberg, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

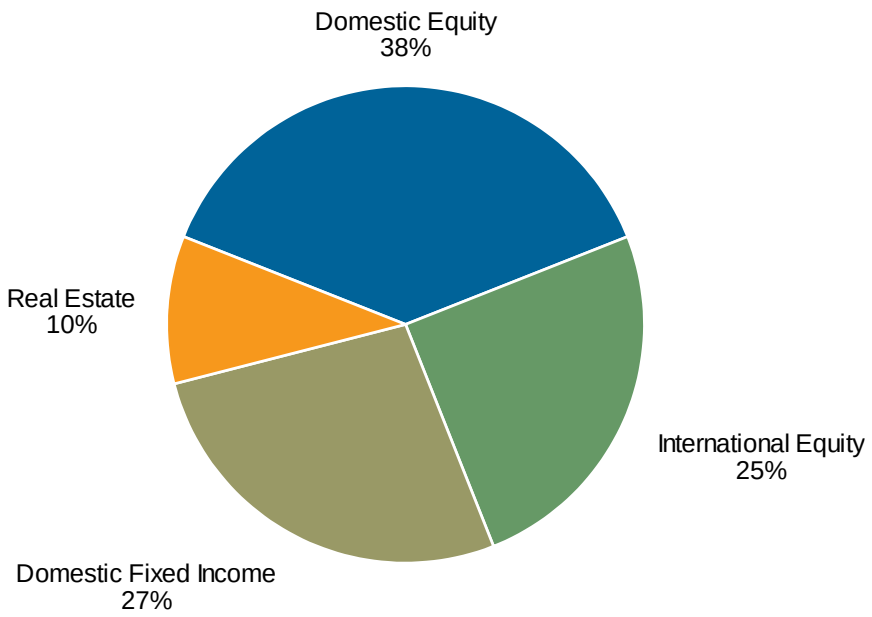
Asset Allocation and Plan Review

Asset Allocation

Actual Asset Allocation



Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	88,784	39.7%	38.0%	1.7%	3,755
International Equity	55,391	24.8%	25.0%	(0.2%)	(549)
Domestic Fixed Income	52,907	23.6%	27.0%	(3.4%)	(7,508)
Real Estate	26,512	11.8%	10.0%	1.8%	4,136
Cash Account	166	0.1%	0.0%	0.1%	166
Total	223,761	100.0%	100.0%		

Asset Distribution Across Investment Managers

	March 31, 2023				December 31, 2022	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	**$88,784,424**	**39.68%**	**$(39,375)**	**$5,323,337**	**$83,500,462**	**39.16%**
Emerald Advisers, Inc.	6,980,291	3.12%	(13,830)	284,214	6,709,907	3.15%
Ceredex Value Advisors	7,431,667	3.32%	(16,085)	291,245	7,156,506	3.36%
SSgA S&P 500 Index	61,490,197	27.48%	(6,931)	4,275,633	57,221,494	26.84%
SSgA S&P 400 Index	12,882,269	5.76%	(2,529)	472,245	12,412,554	5.82%
International Equity	**$55,391,350**	**24.75%**	**$(40,718)**	**$4,684,124**	**$50,747,945**	**23.80%**
Morgan Stanley Int'l Equity	23,199,349	10.37%	(40,718)	2,328,959	20,911,108	9.81%
Causeway Emerging Markets	5,027,095	2.25%	0	239,385	4,787,710	2.25%
William Blair Intl Growth	27,164,906	12.14%	0	2,115,779	25,049,127	11.75%
Domestic Fixed Income	**$52,907,202**	**23.64%**	**$(16,770)**	**$1,681,187**	**$51,242,786**	**24.03%**
Richmond Capital	52,907,202	23.64%	(16,770)	1,681,187	51,242,786	24.03%
Real Estate	**$26,512,035**	**11.85%**	**$(67,118)**	**$(976,398)**	**$27,555,551**	**12.92%**
Heitman	26,512,035	11.85%	(67,118)	(976,398)	27,555,551	12.92%
Cash Account	**$166,426**	**0.07%**	**$0**	**$1,773**	**$164,652**	**0.08%**
Total Fund	**$223,761,437**	**100.0%**	**$(163,981)**	**$10,714,022**	**$213,211,396**	**100.0%**

- The City of Fort Pierce Retirement and Benefit System plan assets are $223.8 million at the end of the March 31, 2023.
- Investment returns were positive for the fourth quarter at $10.7 million.

Investment Manager Returns & Peer Rankings (Gross of Fees)

- The first quarter marked the second consecutive quarters of positive results across equities and fixed income.
- Relative to the index, the Fund outperformed the index and finished on the top quartile vs. peers.
- Manager selection within international equities was the main driver of relative results during the quarter as all of the managers within the segment strongly outperformed their benchmarks for the quarter.
- The relative overweight to Real Estate was a detractor of performance as this was the only asset class to post negative absolute results for the quarter.
- Over the long term, the fund is outperforming the benchmark on a gross of fee basis but slightly lagging on a net of fee basis.

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Last 10 Years	
Domestic Equity	**6.38%**	**60**	**(6.92%)**	**12**	**19.15%**	**33**	**9.89%**	**50**	**11.51%**	**38**
Domestic Equity Benchmark	6.16%	71	(7.93%)	46	19.12%	34	9.72%	63	11.29%	61
Pub Pln- Dom Equity	6.52%		(8.00%)		18.81%		9.90%		11.36%	
Emerald Advisers, Inc.	4.23%	85	(11.21%)	55	15.10%	66	6.41%	84	11.04%	65
Russell 2000 Growth Index	6.07%	67	(10.60%)	48	13.36%	84	4.26%	94	8.49%	96
Callan Small Cap Growth	7.16%		(10.81%)		16.93%		8.98%		11.27%	
Ceredex Value Advisors	4.06%	5	1.74%	4	22.84%	71	6.21%	49	8.52%	63
Russell 2000 Index	2.74%	21	(11.61%)	78	17.51%	94	4.71%	83	8.04%	79
Russell 2000 Value Index	(0.66%)	84	(12.96%)	87	21.01%	80	4.55%	84	7.22%	97
Callan Small Cap Value	1.18%		(6.40%)		25.13%		6.17%		8.98%	
SSgA S&P 500 Index	7.47%	23	(7.75%)	48	18.58%	46	11.18%	41	12.26%	41
Standard & Poor's 500	7.50%	23	(7.73%)	47	18.60%	45	11.19%	40	12.24%	41
Callan Large Cap Core	6.73%		(7.85%)		18.47%		10.62%		12.14%	
SSgA S&P 400 Index	3.81%	52	(5.15%)	31	22.10%	31	7.70%	66	9.82%	62
S&P Mid Cap 400 Index	3.81%	52	(5.12%)	31	22.10%	31	7.67%	66	9.80%	62
Callan Mid Capitalization	4.21%		(7.32%)		20.15%		8.41%		10.43%	
International Equity	**9.23%**	**7**	**(3.97%)**	**59**	**11.80%**	**74**	**3.66%**	**36**	**5.14%**	**58**
International Equity Benchmark	6.87%	78	(5.07%)	78	11.80%	74	2.47%	78	4.17%	97
Pub Pln- Intl Equity	7.42%		(3.71%)		12.96%		3.14%		5.38%	
Morgan Stanley Int'l Equity	11.14%	6	3.03%	7	12.69%	70	4.19%	32	5.30%	79
MSCI EAFE Index	8.47%	51	(1.38%)	60	12.99%	64	3.52%	63	5.00%	86
Callan NonUS Dev Core Eq	8.53%		(1.09%)		13.97%		4.03%		5.84%	
William Blair Intl Growth(2)	8.45%	63	(7.73%)	91	11.97%	67	3.94%	28	5.50%	31
MSCI ACWI x US (Net)	6.87%	84	(5.07%)	77	11.80%	69	2.47%	67	4.17%	78
Callan Non US Equity MFs	9.42%		(0.60%)		13.23%		3.12%		4.98%	
Causeway Emerging Markets(2)	5.00%	57	(12.30%)	75	6.61%	65	-		-	
MSCI EM	3.96%	68	(10.70%)	55	7.83%	53	(0.91%)	34	2.00%	48
Callan Emerging Equity MF	5.06%		(10.19%)		7.94%		(1.40%)		1.88%	
Domestic Fixed Income	**3.28%**	**25**	**(4.48%)**	**57**	**(1.94%)**	**87**	**1.20%**	**76**	**1.74%**	**64**
Domestic Fixed Income Benchmark	2.96%	62	(4.78%)	72	(2.77%)	96	0.91%	91	1.36%	91
Blmbg Aggregate Index	2.96%	62	(4.78%)	72	(2.77%)	96	0.91%	91	1.36%	91
Pub Pln- Dom Fixed	3.06%		(4.30%)		(0.74%)		1.52%		1.91%	
Richmond Capital	3.28%	32	(4.48%)	40	(1.94%)	70	1.20%	76	1.74%	65
Blended Benchmark(1)	2.96%	79	(4.78%)	64	(2.77%)	96	0.91%	97	1.37%	98
Callan Core Bond FI	3.16%		(4.57%)		(1.72%)		1.37%		1.83%	
Real Estate	**(3.54%)**	**81**	**(2.41%)**	**50**	**10.62%**	**29**	**7.06%**	**60**	**-**	
Real Estate Benchmark	(3.50%)	81	(3.69%)	64	8.17%	59	7.13%	57	-	
Pub Pln- Real Estate	(1.81%)		(2.41%)		8.53%		7.41%		9.10%	
Heitman(2)	(3.79%)	87	(3.40%)	73	9.49%	29	6.29%	73	-	
NFI-ODCE Equal Weight Net	(3.50%)	83	(3.69%)	80	8.17%	43	7.13%	57	8.82%	46
Callan OE Core Cmngld RE	(1.45%)		(0.87%)		7.75%		7.21%		8.49%	
Total Fund	**5.03%**	**26**	**(5.25%)**	**62**	**10.12%**	**73**	**6.07%**	**56**	**7.42%**	**42**
Total Fund Benchmark*	4.51%	51	(5.45%)	68	10.46%	66	6.11%	55	7.25%	48
CPI + 5%	2.87%	95	9.99%	1	10.36%	67	8.88%	1	7.64%	28
Callan Public Fund Spr DB	4.55%		(4.78%)		11.15%		6.22%		7.22%	

- Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI xUS, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.
- (1) Blmbg Gov/Credit Bond Index through May 31, 2013 and Blmbg Aggregate thereafter. (2) Returns are reported net of fees.

Investment Manager Objectives

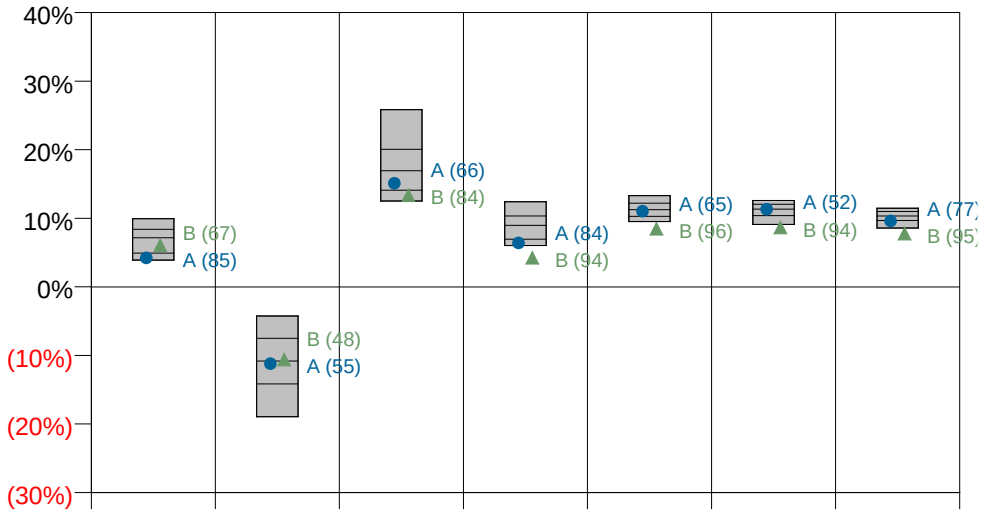
Manager	Objective	Comments
Total Fund	Outperform the CPI + 5% over long term.	**Not Met**
Emerald	Outperform the Russell 2000 Growth Index (net of fees) over rolling 3-year periods by 0.50%.	**Met**
	Outperform the median small cap growth manager over rolling 3-year periods.	**Not Met**
Ceredex	Outperform the Russell 2000 Value Index (net of fees) over rolling 3-year periods by 0.50%.	**Met**
	Outperform the median small cap value manager over rolling 3-year periods.	**Not Met**
SSgA S&P MidCap 400 Index	Replicate the return of the S&P MidCap 400 Index.	**Met**
SSgA S&P 500 Index	Replicate the return of the S&P 500 Index.	**Met**
Morgan Stanley Developed	Outperform the MSCI EAFE (net of fees) over rolling 3-year periods by 0.50% over rolling 3-year periods.	**Not Met**
	Outperform the median international equity manager over rolling 3-year periods.	**Not Met**
William Blair	Outperform the MSCI ACWI ex-US Index (net of fees) over rolling 3-year periods.	**Met**
	Outperform the median international equity manager over rolling 3-year periods.	**Not Met**
Causeway Emerging	Outperform the MSCI Emerging Markets Index over rolling 3-year periods by 1.00%.	**Not Met**
	Outperform the median emerging markets equity manager over rolling 3-year periods.	**Not Met**
Richmond	Outperform BC Aggregate (net of fees) over rolling 3-year periods by 0.25%.	**Met**
	Outperform the median fixed income manager over rolling 3-year periods.	**Not Met**
Heitman (HART)	Outperform the NFI-ODCE Index over rolling 5-year periods.	**Not Met**

Callan

Domestic Equity

Emerald Advisors Small Cap Growth

Performance vs Callan Small Cap Growth (Gross)

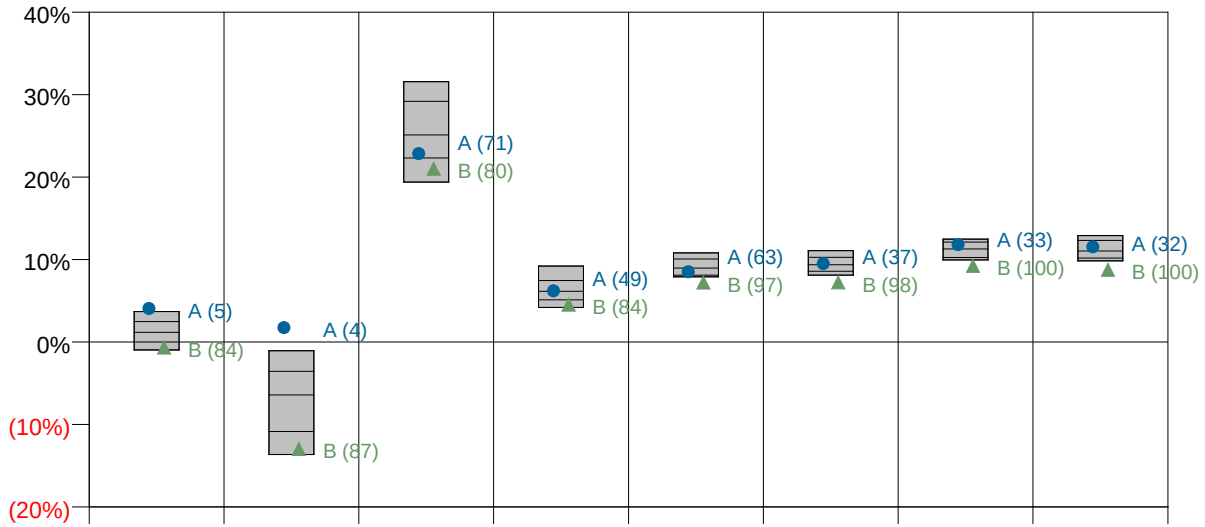


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 19 Years
10th Percentile	9.95	(4.25)	25.85	12.43	13.33	12.61	11.47
25th Percentile	8.39	(7.50)	20.08	10.34	12.21	12.06	11.01
Median	7.16	(10.81)	16.93	8.98	11.27	11.33	10.36
75th Percentile	4.92	(14.14)	14.11	6.96	10.28	10.41	9.69
90th Percentile	3.90	(18.93)	12.52	6.05	9.52	9.11	8.60
Emerald Advisers ● A	4.23	(11.21)	15.10	6.41	11.04	11.32	9.60
Russell 2000 Growth Index ▲ B	6.07	(10.60)	13.36	4.26	8.49	8.67	7.78

- During the quarter large and mid cap stocks outperformed small caps, and growth outpaced value.
- The manager posted positive absolute results but lagged the Russell 2000 Growth index as well as peers. The manager's relative results were hurt by the relative performance within technology (top detractor), industrials, consumer discretionary, energy and utilities.
- Over the long term, the manager continues provide strong results on an absolute and relative basis.

Ceredex Value Advisors Small Cap Value

Performance vs Callan Small Cap Value (Gross)

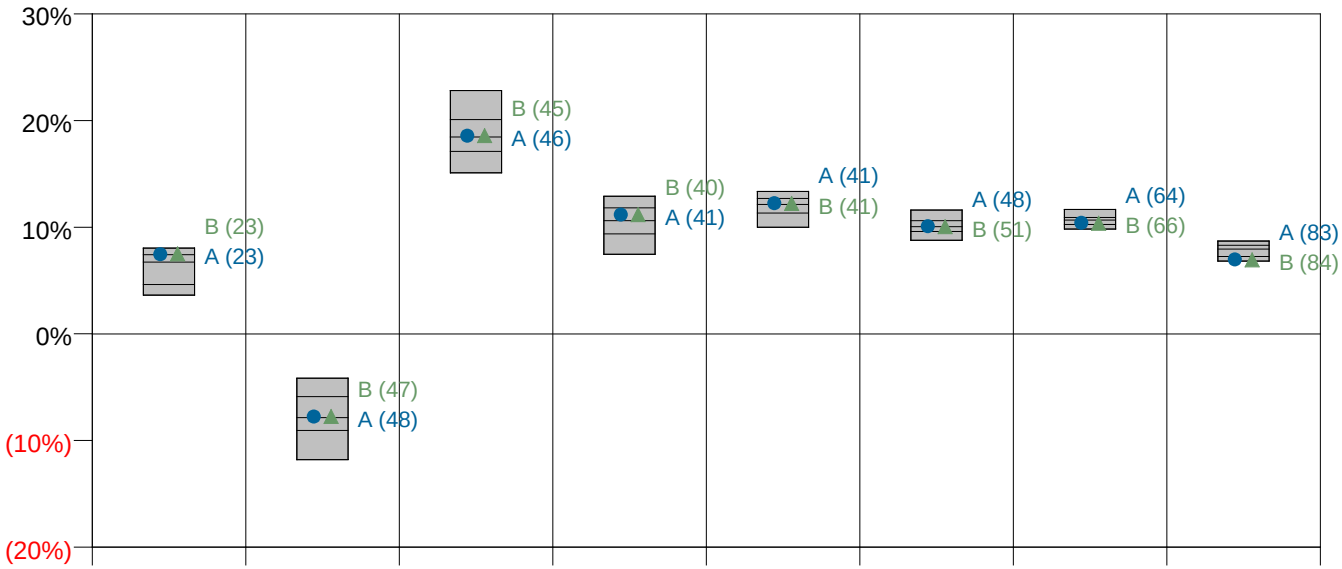


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 24 Years
10th Percentile	3.71	(1.05)	31.58	9.23	10.82	11.09	12.49	12.92
25th Percentile	2.48	(3.55)	29.20	7.46	10.09	10.29	12.13	12.32
Median	1.18	(6.40)	25.13	6.17	8.98	9.39	11.29	11.04
75th Percentile	0.00	(10.84)	22.33	5.13	8.12	8.58	10.26	10.20
90th Percentile	(0.96)	(13.65)	19.40	4.19	7.91	8.11	9.96	9.86
Ceredex Value Advisors ● A	4.06	1.74	22.84	6.21	8.52	9.51	11.82	11.55
Russell 2000 Value Index ▲ B	(0.66)	(12.96)	21.01	4.55	7.22	7.24	9.24	8.77

- During the quarter the Russell 2000 Value index was the only major index to post negative absolute performance, mainly driven by the turmoil experienced within the regional banks system.
- The manager experienced a few tough times during 2019 and 2020 due to their exposure to more COVID-sensitive cyclical names, and given the higher quality focus, they lagged when markets recovered. However, the manager has been able to overcome these obstacles and absolute and relative performance over the short and long term has improved, with the manager outperforming across all periods. Results vs. peers also continue to improve.

SSgA S&P 500 Index

Performance vs Callan Large Cap Core (Gross)

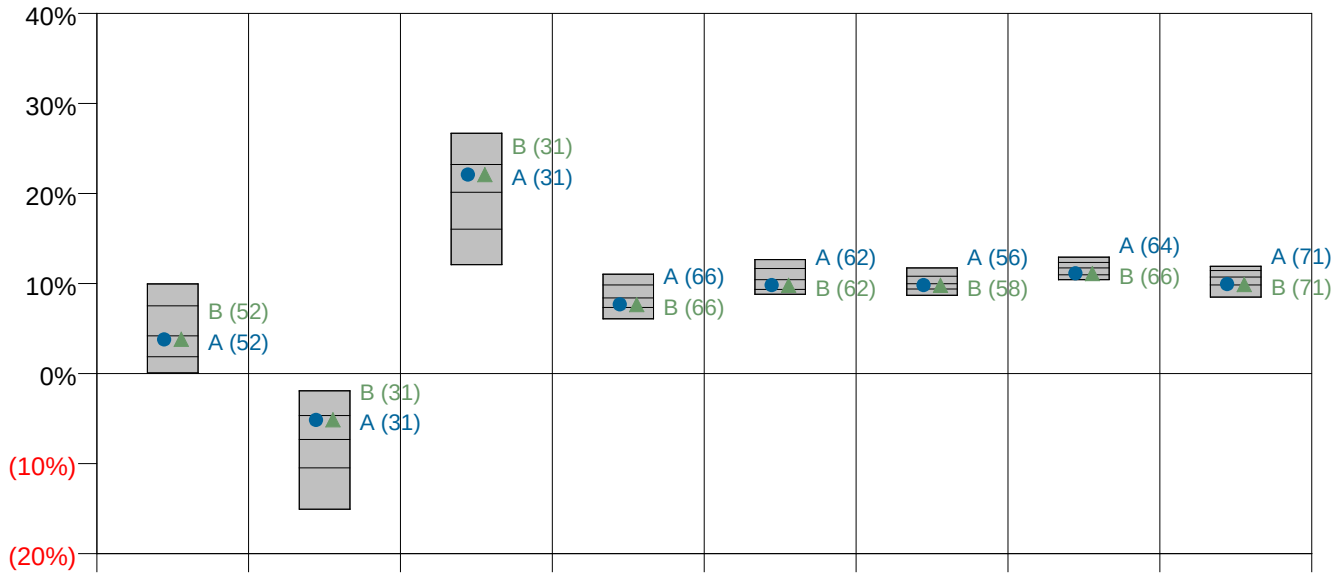


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 24 Years
10th Percentile	8.05	(4.14)	22.83	12.91	13.36	11.61	11.68	8.70
25th Percentile	7.44	(5.88)	20.09	11.83	12.71	10.62	10.92	8.31
Median	6.73	(7.85)	18.47	10.62	12.14	10.06	10.68	7.96
75th Percentile	4.64	(9.05)	17.12	9.38	11.34	9.61	10.26	7.26
90th Percentile	3.64	(11.79)	15.11	7.46	10.00	8.79	9.83	6.83
SSgA S&P 500 Index ● A	7.47	(7.75)	18.58	11.18	12.26	10.10	10.41	6.98
S&P 500 Index ▲ B	7.50	(7.73)	18.60	11.19	12.24	10.06	10.37	6.95

- The fund continues to track the index closely at a very low fee.

SSgA S&P Mid Cap 400 Index

Performance vs Callan Mid Capitalization (Gross)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 24 Years
10th Percentile	9.96	(1.90)	26.71	11.05	12.67	11.75	12.94	11.93
25th Percentile	7.54	(4.65)	23.24	9.85	11.67	10.83	12.36	11.46
Median	4.21	(7.32)	20.15	8.41	10.43	9.99	11.76	10.74
75th Percentile	1.87	(10.47)	16.05	7.36	9.36	9.40	10.97	9.84
90th Percentile	0.09	(15.05)	12.10	6.08	8.81	8.70	10.45	8.50
SSgA S&P 400 Index ● A	3.81	(5.15)	22.10	7.70	9.82	9.84	11.14	9.94
S&P 400 Mid Cap Index ▲ B	3.81	(5.12)	22.10	7.67	9.80	9.82	11.11	9.89

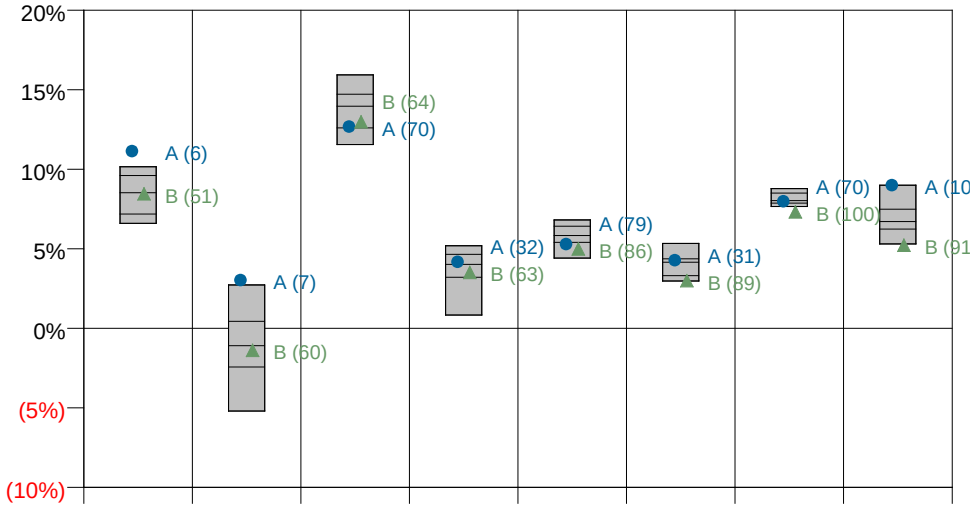
- The fund continues to track the index closely at a very low fee.

Callan

International Equity Performance

Morgan Stanley Developed International Equity

Performance vs Callan Non-US Developed Core Equity (Gross)

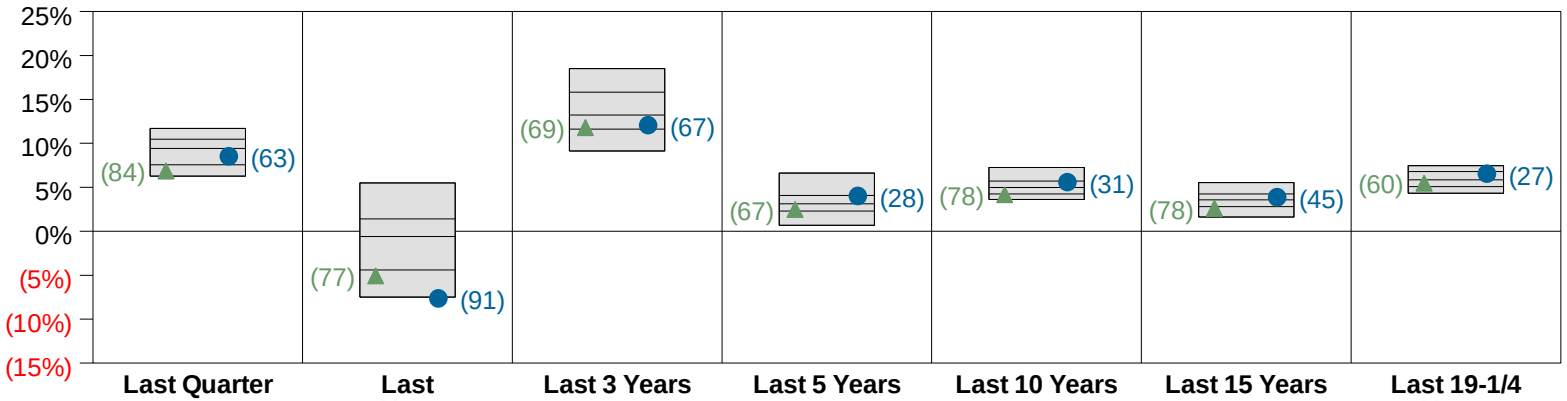


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 31 1/2 Years
10th Percentile	10.16	2.74	15.94	5.19	6.82	5.34	8.79	9.00
25th Percentile	9.62	0.45	14.72	4.66	6.42	4.38	8.51	7.49
Median	8.53	(1.09)	13.97	4.03	5.84	4.16	8.04	6.72
75th Percentile	7.20	(2.42)	12.61	3.21	5.41	3.31	7.87	6.24
90th Percentile	6.60	(5.20)	11.56	0.84	4.42	2.98	7.66	5.31
Morgan Stanley Int'l Equity ● A	11.14	3.03	12.69	4.19	5.30	4.28	7.99	9.01
MSCI EAFE ▲ B	8.47	(1.38)	12.99	3.52	5.00	3.00	7.32	5.23

- Morgan Stanley continued to exhibit positive momentum and posted strong absolute and relative results during the first quarter.
- The portfolio's relative performance for the quarter came from their stock selection within consumer discretionary, financials, industrials, and consumer staples. From an asset allocation perspective, their overweight to technology and the zero allocation to real estate contributed to relative performance.
- Long term results have come around after the overall results from 2021 and the challenges of 2022. The manager is now outperforming the MSCI EAFE index across the board (except for 3-years), and the strategy has become more competitive vs. peers.

William Blair International Growth Equity

Performance vs Callan Non-US Equity Mutual Funds (Institutional Net)

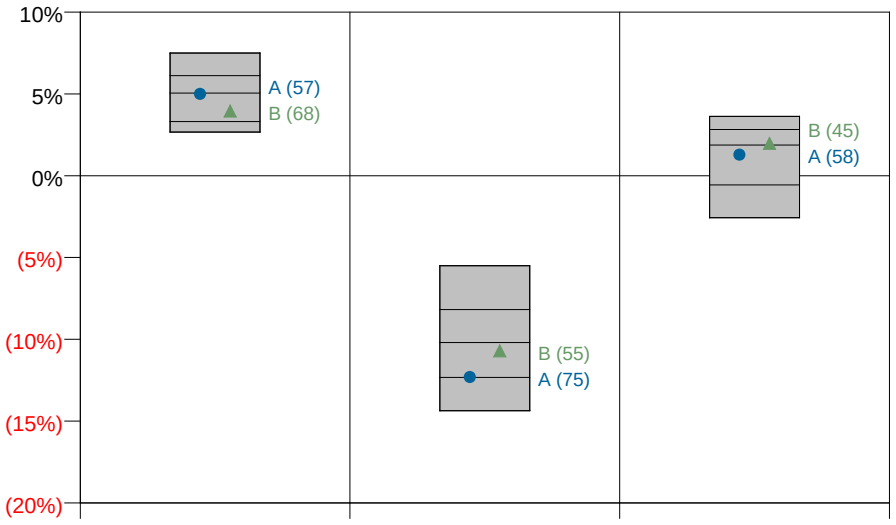


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 19-1/4 Years
10th Percentile	11.71	5.50	18.50	6.62	7.26	5.54	7.46
25th Percentile	10.47	1.41	15.82	4.08	5.71	4.24	6.78
Median	9.42	(0.60)	13.23	3.12	4.98	3.58	5.86
75th Percentile	7.56	(4.41)	11.62	2.29	4.25	2.81	5.08
90th Percentile	6.27	(7.49)	9.13	0.68	3.61	1.61	4.33
William Blair Intl Growth ●	8.45	(7.73)	11.97	3.94	5.50	3.78	6.45
MSCI ACWI xUS ▲	6.87	(5.07)	11.80	2.47	4.17	2.62	5.48

- International equities posted solid returns during the first quarter, bringing global and global ex-US markets back to black. In a reversal from 2022, growth outpaced value across developed and emerging markets, which was a tailwind for William Blair.
- Absolute performance during the quarter was strong but relative results for the last year remain behind the benchmark. Relative outperformance was driven by positive stock selection across information technology, healthcare and consumer discretionary. In addition, an overweight to information technology and industrials and underweight to financials positively contributed to relative results.
- Over the long-term, the manager continues to deliver strong results and is above peer median across these timeframes.
- Note that effective March 1st, the assets are invested in the CIT Tier 3.

Causeway Emerging Markets

Performance vs Callan Emerging Markets Equity Mutual Funds (Institutional Net)



	Last Quarter	Last Year	Last 3 1/2 Years
10th Percentile	7.50	(5.49)	3.63
25th Percentile	6.12	(8.17)	2.83
Median	5.06	(10.19)	1.88
75th Percentile	3.32	(12.32)	(0.56)
90th Percentile	2.67	(14.36)	(2.56)
Causeway Emerging Markets ● A	5.00	(12.30)	1.29
MSCI EM ▲ B	3.96	(10.70)	1.98

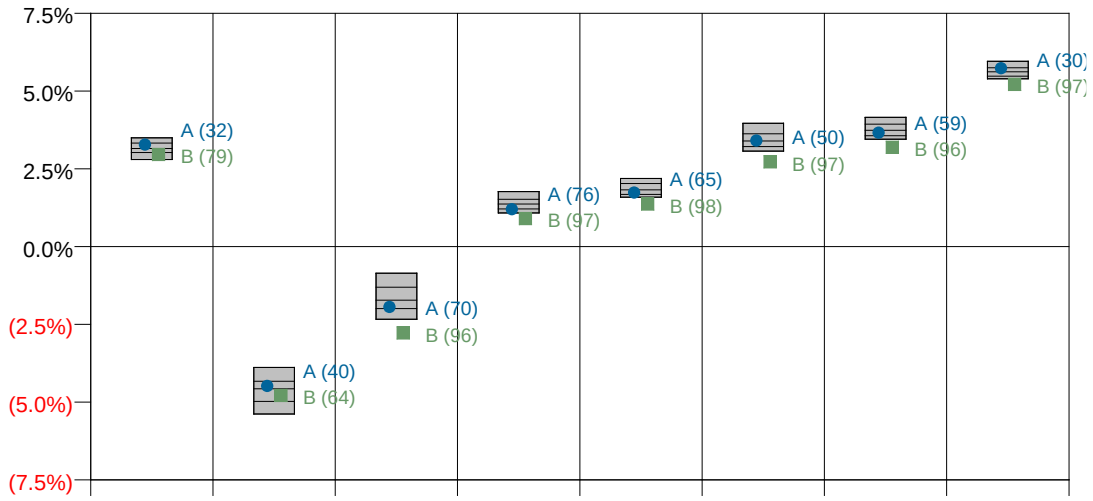
- Despite underperforming developed markets for the quarter, emerging markets posted positive absolute results. In a reversal from 2022, investors preferred growth alongside a drawdown in banks; Information Technology was the largest outperformer.
- The manager's stock selection within technology, health care, and financials contributed to positive relative results for the quarter, as the manager outpaced the MSCI Emerging Markets Index by 1.04% on a net of fee basis. In addition, security selection within India, Taiwan and Saudi Arabia.
- Over the 1-year and since inception, the manager is underperforming the index and peer median. However, this is within expectations as emerging markets returns seem to be more responsive to macro events than fundamentals.

Callan

Fixed Income

Richmond Capital Core Fixed Income

Performance vs Callan Core Bond Fixed Income (Gross)



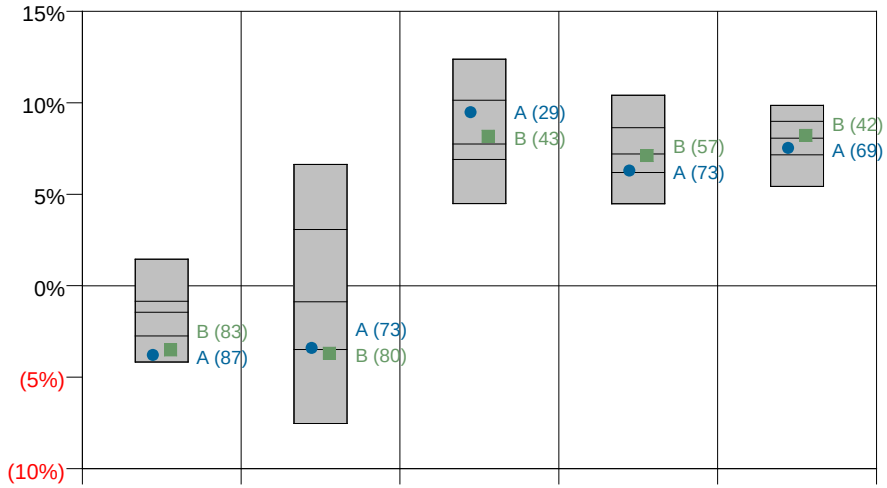
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 32 1/2 Years
10th Percentile	3.50	(3.88)	(0.86)	1.77	2.19	3.97	4.16	5.96
25th Percentile	3.33	(4.33)	(1.31)	1.53	2.03	3.63	3.94	5.75
Median	3.16	(4.57)	(1.72)	1.37	1.83	3.40	3.74	5.62
75th Percentile	3.03	(4.97)	(1.99)	1.21	1.68	3.22	3.57	5.48
90th Percentile	2.80	(5.38)	(2.34)	1.08	1.59	3.07	3.45	5.40
Richmond Capital Mgmt ● A	3.28	(4.48)	(1.94)	1.20	1.74	3.41	3.67	5.74
Blended Benchmark* ■ B	2.96	(4.78)	(2.77)	0.91	1.37	2.73	3.20	5.21

- The first quarter of 2023 marked the second quarter in a row that bonds posted positive results after experiencing the worst one-year performance for the Bloomberg Aggregate index in its history. However, these results came with some intra quarter volatility on the bond market.
- Richmond outperformed the benchmark and peer median during the first quarter of 2023. The manager holds an overweight to credit and mortgages vs. the benchmark, which eroded some of the positive results achieved during January and February.
- Over the long term, the manager is outperforming the benchmark. Given that this manager is a more traditional, low-risk core mandate, it is not surprising to see them below the peer median.

Real Estate

Heitman America Real Estate Trust

Performance vs Callan Open End Core Commingled Real Estate (Net)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 8 1/2 Years
10th Percentile	1.45	6.63	12.39	10.42	9.86
25th Percentile	(0.85)	3.08	10.15	8.64	8.99
Median	(1.45)	(0.87)	7.75	7.21	8.07
75th Percentile	(2.74)	(3.48)	6.91	6.19	7.16
90th Percentile	(4.17)	(7.52)	4.49	4.48	5.44
Heitman Net ● A	(3.79)	(3.40)	9.49	6.29	7.54
NCREIF NFI ODCE Eq Wt Net ■ B	(3.50)	(3.69)	8.17	7.13	8.22

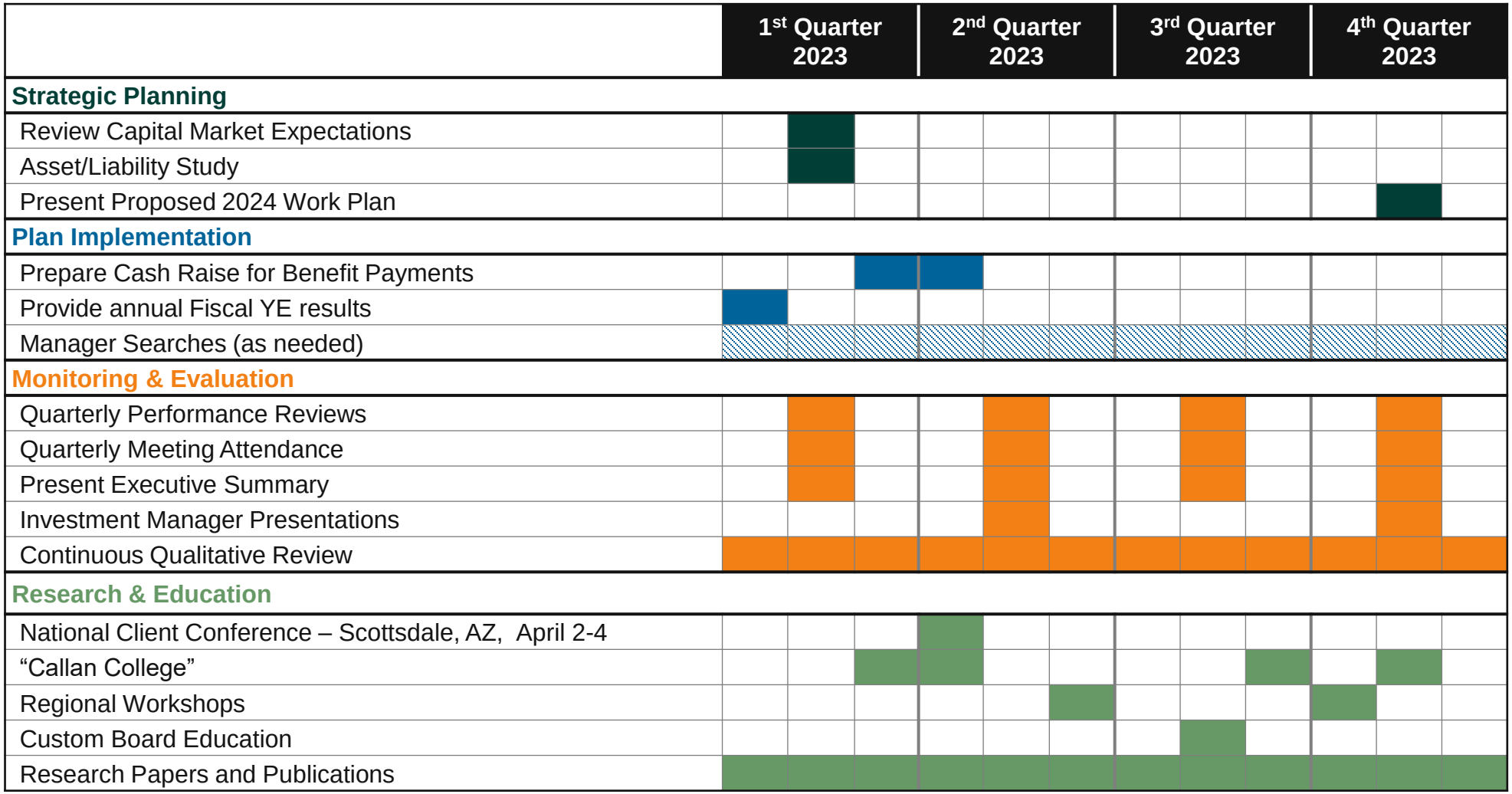
- Heitman posted it's second quarter of negative absolute results and finished behind the NCREIF NFI-ODCE index. During 2022 Real Estate was one of the bright spots across the capital markets, but results are slowly eroding as higher interest rates continue to put pressure on capitalization rates and valuations.
- During the quarter, four major sectors had negative appreciation, apartments, industrial, retail and office. Heitman is anticipating additional asset value trimming for private real estate appears necessary and will impact portfolio performance.
- Performance has improved over the 3-year period but continues to lag over 5-years and since inception.

Callan

Appendix

Callan's Proposed 2023 Work Plan

City of Fort Pierce Retirement and Benefit System



Callan Institute Events

Upcoming conferences, workshops, and webinars

Callan College

Intro to Alternatives

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with alternative investments like private equity, hedge funds, and real estate and how they can play a key role in any portfolio. You will learn about the importance of allocations to alternatives and how to consider integrating, evaluating, and monitoring them.

- August 23-24, 2023 – Virtual Session via Zoom

Intro to Investments—Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

- May 23–25, 2023 – Virtual Session via Zoom
- September 26–28, 2023 – Virtual Session via Zoom
- Nov 1 -2, 2023 – In-Person Session – Atlanta

Please visit our website at callan.com/events-education as we add dates to our 2023 calendar!

Mark Your Calendar

2023 Regional Workshops

June 27, 2023 – Denver

June 29, 2023 – San Francisco

October 24, 2023 – New York

October 26, 2023 – Chicago

2024 National Conference

April 8 –10, 2024 – San Francisco

Watch your email for further details and an invitation.

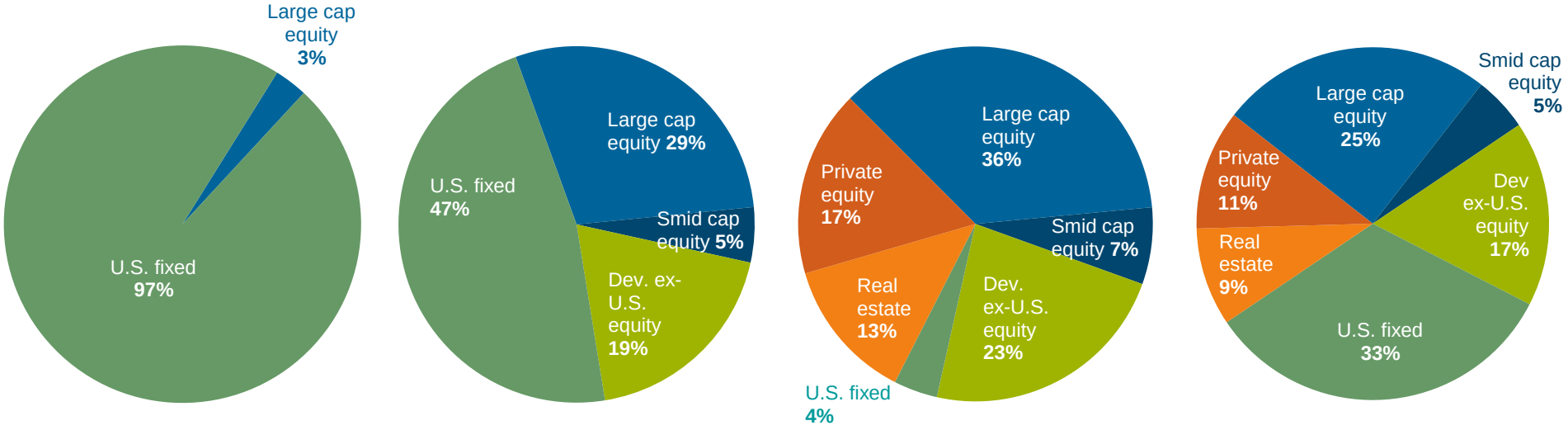
Webinars & Research Café Sessions

Webinar: DC – Managed Accounts

May 11, 2023 – 9:30am (PT)

7% Expected Returns Over Past 30 Years

Increasing Complexity



1993	2008	2022	2023
Return: 7.0%	**Return: 7.0%**	**Return: 7.0%**	**Return: 7.0%**
Risk: 6.2%	**Risk: 9.4%**	**Risk: 16.8%**	**Risk: 11.8%**

Increasing Risk

In 1993, our return expectation for broad U.S. fixed income was 6.85%.

Just 3% in return-seeking assets was required to earn a 7% projected return.

15 years later, an investor would have needed over half of the portfolio in public equities to achieve a 7% projected return.

In 2022 an investor was required to include 96% in return-seeking assets (including 30% in private market investments) to earn a 7% projected return at almost 3x the volatility compared to 1993.

Today's 7% expected return portfolio is much more reasonable than it was just a year ago. The allocation to fixed income jumps to 33%, while risk drops by 30%. Illiquid alternatives (PE and private RE) also drop by 1/3.

2023 vs. 2022 Risk and Returns Assumptions

Summary of Callan's Long-Term Capital Markets Assumptions (2023–2032)

Asset Class	Index	Projected Return 1-Year Arithmetic	Projected Return 10-Year Geometric*	Real	Projected Risk Standard Deviation	2022–2031 1-Year Arithmetic	2022–2031 10-Year Geometric*	2022–2031 Standard Deviation	vs. 2022 Geometric* Delta	vs. 2022 Std Dev Delta
Equities										
Broad U.S. Equity	Russell 3000	8.75%	7.35%	4.85%	18.05%	8.00%	6.60%	17.95%	0.75%	0.10%
Large Cap U.S. Equity	S&P 500	8.60%	7.25%	4.75%	17.75%	7.85%	6.50%	17.70%	0.75%	0.05%
Smid Cap U.S. Equity	Russell 2500	9.60%	7.45%	4.95%	22.15%	8.75%	6.70%	21.30%	0.75%	0.85%
Global ex-U.S. Equity	MSCI ACWI ex USA	9.45%	7.45%	4.95%	21.25%	8.70%	6.80%	20.70%	0.65%	0.55%
Developed ex-U.S. Equity	MSCI World ex USA	9.00%	7.25%	4.75%	20.15%	8.25%	6.50%	19.90%	0.75%	0.25%
Emerging Market Equity	MSCI Emerging Markets	10.45%	7.45%	4.95%	25.70%	9.80%	6.90%	25.15%	0.55%	0.55%
Fixed Income										
Short Duration Gov/Credit	Bloomberg 1-3 Year Gov/Credit	3.75%	3.80%	1.30%	2.30%	1.50%	1.50%	2.00%	2.30%	0.30%
Core U.S. Fixed	Bloomberg Aggregate	4.25%	4.25%	1.75%	4.10%	1.80%	1.75%	3.75%	2.50%	0.35%
Long Government	Bloomberg Long Gov	4.55%	3.70%	1.20%	13.50%	1.85%	1.10%	12.50%	2.60%	1.00%
Long Credit	Bloomberg Long Credit	5.75%	5.20%	2.70%	11.75%	2.60%	2.10%	10.50%	3.10%	1.25%
Long Government/Credit	Bloomberg Long Gov/Credit	5.25%	4.75%	2.25%	11.35%	2.30%	1.80%	10.40%	2.95%	0.95%
TIPS	Bloomberg TIPS	4.10%	4.00%	1.50%	5.30%	1.35%	1.25%	5.05%	2.75%	0.25%
High Yield	Bloomberg High Yield	6.75%	6.25%	3.75%	11.75%	4.40%	3.90%	10.75%	2.35%	1.00%
Global ex-U.S. Fixed	Bloomberg Global Agg ex US	2.70%	2.25%	-0.25%	9.80%	1.20%	0.80%	9.20%	1.45%	0.60%
Emerging Market Sov Debt	EMBI Global Diversified	6.25%	5.85%	3.35%	10.65%	4.00%	3.60%	9.50%	2.25%	1.15%
Alternatives										
Core Real Estate	NCREIF ODCE	6.60%	5.75%	3.25%	14.20%	6.60%	5.75%	14.20%	0.00%	0.00%
Private Infrastructure	MSCI GI Infra/FTSE Dev Core 50/50	7.15%	6.15%	3.65%	15.45%	7.10%	6.10%	15.45%	0.05%	0.00%
Private Equity	Cambridge Private Equity	11.95%	8.50%	6.00%	27.60%	11.45%	8.00%	27.60%	0.50%	0.00%
Private Credit	N/A	8.00%	7.00%	4.50%	15.50%	6.40%	5.50%	14.60%	1.50%	0.90%
Hedge Funds	Callan Hedge FOF Database	5.80%	5.55%	3.05%	8.45%	4.35%	4.10%	8.20%	1.45%	0.25%
Commodities	Bloomberg Commodity	5.05%	3.50%	1.00%	18.00%	4.05%	2.50%	18.00%	1.00%	0.00%
Cash Equivalents	90-Day T-Bill	2.75%	2.75%	0.25%	0.90%	1.20%	1.20%	0.90%	1.55%	0.00%
Inflation	CPI-U		2.50%		1.60%		2.25%	1.60%	0.25%	0.00%

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

Source: Callan

Callan's Ethics Policy

The success of our business depends on maintaining our unblemished record for providing clients with objective advice. Callan's approach has always been to acknowledge and then aggressively manage possible conflicts to ensure they never manifest in the advice we give clients. Our firm is vigilant about employing a highly systematized process that vets potential conflicts, maintains separation of business units, and ensures that we are being entirely transparent in all our relationships. We mitigate conflicts of interest by adhering to the following:

Code of ethical responsibility: Callan adheres to a firm-wide ethical code which each associate must review and acknowledge in writing every year. This code affirms for Callan employees that they must uphold their duty to our clients by adhering to specific policies and procedures. Any breach of this code can result in immediate termination.

Compliance: Our in-house compliance officer makes sure Callan is adhering to all industry standards and regulations, while also identifying risks and putting procedures in place to mitigate them. This officer reports directly to the board of directors to ensure that any employee and all compliance oversight have a separate and distinct line of reporting away from the internal manager and report structures.

Separation of business units: Each of Callan's business units maintains its own personnel, as well as its own profit-and-loss accounting system. Employee compensation is contained within each separate business unit. Clients from one business unit do not receive preferential treatment in another. This statement of fact is communicated to each client at the start of any relationship with Callan and reiterated in writing on an annual basis.

Peer Review: Every manager search or strategic planning project undertaken for a client is a collective effort involving the client, general consultant, a team of specialists, and ultimately a peer review committee. Callan's Manager Search Committee, composed of approximately a dozen senior consultants, verifies the accuracy, completeness and objectivity of all methods used in the manager screening process. For strategic planning services, the Client Policy Review Committee, which is comprised of approximately a dozen senior consultants, evaluates all reports before they are submitted to the client. This environment of complete transparency requires a thoroughly documented process that is free of unsupported personal opinions and biases.

Disclosure: Callan believes in being proactively transparent with respect to all business activities and relationships. We routinely furnish our fund sponsor clients with a complete list of all investment managers who have professional relationships with Callan. New clients receive this information at the outset of our relationship.

Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

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Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

This content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The statements made herein may include forward-looking statement regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

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Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.

Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
Report From Money Manager - Morgan Stanley

Attachments

Report From Money Manager - Morgan Stanley

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:36 PM
Final Approval Date: 05/10/2023

Morgan Stanley

INVESTMENT MANAGEMENT

CRC#5651844-EXP.04.30.2024



International Equity Trust

City of Fort Pierce Retirement and Benefit System

May 18, 2023

Marketing Communication. For Professional Clients Only, except in the U.S. where the material is for Institutional Investor use only and not for onward distribution.

International Equity Trust

Data as of March 31, 2023

Original Investment (September 1, 1991)	$2,767,286.72
+ Contributions	9,045,000.00
-Withdrawals	(15,131,563.00)
- Investment Management Fees	(3,113,488.02)
+ Interest Income	287,731.17
+ Dividend Income	9,468,780.99
+ Realized Gain/(Loss)	17,371,765.57
- Other Expenses	(25,645.65)
+/- Market Appreciation/(Depreciation)	1,323,237.11
Market Value	$23,199,348.73[1]

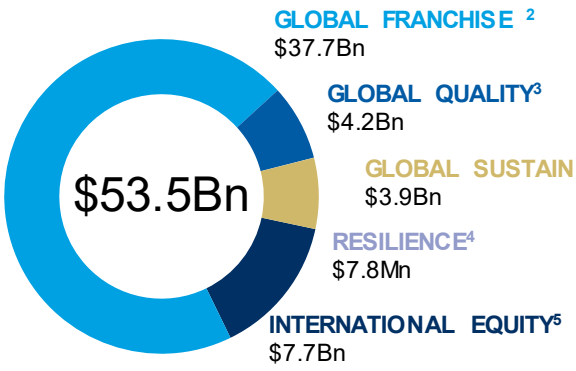
1. State Street custodial accounting information reflects time period beginning January 1993. Data not available for client inception of September 1, 1991. Fund Accounting Systems changed effective August 1, 2001. All cumulative numbers past July 31, 2001 should be considered estimates. Our figures represent investments in the Morgan Stanley Investment Management International Equity Trust.

+25yrs experience in quality investing

International Equity Team

A disciplined and well-resourced team

Assets Under Management[1]



- Fourteen investment professionals with ~200 years of combined investment experience
- Incentives aligned with those of our clients
- Accessible portfolio managers with access to company managements
- Dedicated portfolio specialists to oversee client servicing requirements

Portfolio Management Team [6]

William Lock (Head) Managing Director (31/29 years)	**Bruno Paulson[7]** Managing Director (29/14 years)
Nic Sochovsky Managing Director (25/8 years)	**Alex Gabriele, CFA** Managing Director (14/11 years)
Marcus Watson Managing Director (15/15 years)	**Isabelle Mast, PhD** Executive Director (18/1 years)
Nathan Wong, CFA[8] Executive Director (23/6 years)	**Richard Perrott, CFA** Executive Director (17/8 years)
Marte Borhaug[9] Head of Sustainable Outcomes Executive Director (13/1 years)	**Vlad Demine, CFA** Head of ESG Research Executive Director (21/14 years)

Anton Kryachok, CFA
Executive Director
(13/1 years)

Research

Helena Miles Vice President (10/4 years)	**Fei Teng** Vice President (10/4 years)

Jinny Hyun
(1/1 year)

Portfolio Specialists [10]

Laura Bottega, COO Head of Client Experience Managing Director (25/17 years)	**Jill Ytuarte** Managing Director (25/19 years)
David Bernard Executive Director (15/15 years)	**Monica Carta** Executive Director (21/21 years)
Alistair Corden-Lloyd Executive Director (31/26 years)	**Candida de Silva** Executive Director (23/4 years)
Colleen Dyer Executive Director (22/16 years)	**Munenori Yoshimi, CFA** Executive Director (29/24 years)
Anna Baron Vice President (33/22 years)	**Julia Forde** Vice President (35/30 years)

Teppei Adachi
(12/4 years)

Cash & Data Analytics

Rob Butler, CFA
Vice President
(12/7 years)

1. AUM as of March 31, 2023, quoted in USD. Figures include assets managed globally under this strategy within a number of separate products, jurisdictions and mandates. The team also provides advisory services to a range of clients.
2. Includes $594 million in Global Brands Equity Income.
3. Includes $214 million in Global Quality ex Tobacco.
4. Includes $2 million in International Resilience and $6 million in American Resilience.
5. Includes $3.1 billion in International Equity Plus
6. As of January 2023. Years of investment experience / years on the International Equity Team.
7. Years of investment experience (7 years as a consultant, 22 years in financial services)/years on the International Equity Team.
8. Years of investment experience (3 years as an accountant, 19 years in financial services)/years on the International Equity Team.
9. Years of experience (12 years in sustainability, 6 years of which in financial services)/years on the International Equity Team.
10. As of January 2023. Years of industry experience / years with the Firm.

Team members may change from time to time.

International Equity Strategy

We seek to generate long-term outperformance by investing in a combination of high quality compounders and value opportunities, the mix of which adjusts over time based on price and prospects



Hold High Quality Compounders



Exploit Value Opportunities

Key is to avoid fading returns

Source: Morgan Stanley Investment Management. The views and opinions expressed herein are those of the portfolio management team, are not representative of the Firm as a whole, and are subject to change at any time due to market or economic conditions. There is no assurance that a portfolio will achieve its investment objective or an investment strategy will work under all market conditions.

International Equity Strategy

Price and Prospects Determine the Balance Between the Two Over Time

- Overall bias towards High Quality Compounders, providing price is reasonable
  - Typically asymmetric returns
  - Superior underlying long-term compounding
- Mix between High Quality Compounders and Value Opportunities is not a top-down allocation and will vary across the market cycle, but the portfolio will typically maintain an overweight to quality
- Currently at top end of High Quality Compounder weighting as Value Opportunities do not provide the greater "margin of safety" required given their prices and prospects



- Valuation of High Quality Compounders vs Value Opportunities
- Earnings prospects for more cyclical / lower quality industries

1. Typical ranges. For illustrative purposes only.

Investment Process

Stock Selection

		High Quality Compounders	Value Opportunities
1	**SCREEN** ~ MSCI ACWI ex USA ~ 2000 stocks > $2bn market capitalization	• Have high returns[1] been sustained? • Is valuation fair value or better?	• Do price or price movements look interesting? • Do returns look reasonable or unusually depressed?
2	**ANALYZE** ~300-400 stocks	• Engine of returns[1] and profitability • Direction of returns[1] • Market shares and distinct competitive advantages • Degree of cyclicality and capital intensity • Financial strength	• Threats & opportunities for sustainable returns • industry dynamics • company developments • material ESG factors • Management • Response to potential threats & opportunities • Incentives • Capital Allocation
3	**VALUE**	• A focus on free cash flow (FCF)[2], not accounting numbers	• FCF yield and other measures such as P/E, ROE, P/B, DCF, EV/NOPAT[3] where relevant
4	**CONSTRUCT** ~55-85 stocks	• Does new idea have a better risk / reward trade-off? • Weights influenced by absolute level of risk and team's level of conviction	• Compounders tend to have larger positions – lower absolute risk • 5% max security weight • No country or sector limits

The information presented represents how the portfolio management team applies their investment process under normal market conditions.

1. ROOCE: Earnings Before Interest and Taxes (EBIT)/ Property Plant and Equipment (PPE) + trade working capital ex Financials (excludes goodwill)
2. Free cash flow = operating cash flow minus capital spending, working capital growth, interest and tax.
3. EV = Enterprise Value = Market Value plus Net Debt. NOPAT = Net operating profit after tax

The Overall Return Pattern of the Portfolio Reflects How We Invest

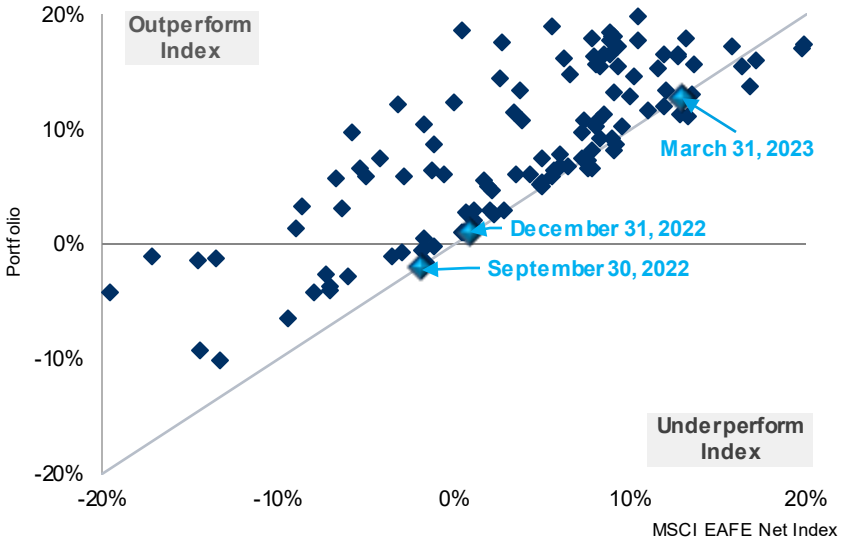
International Equity Trust - USD

Data from Since Inception to March 31, 2023

Past performance is no guarantee of future results

An Asymmetric Return Profile

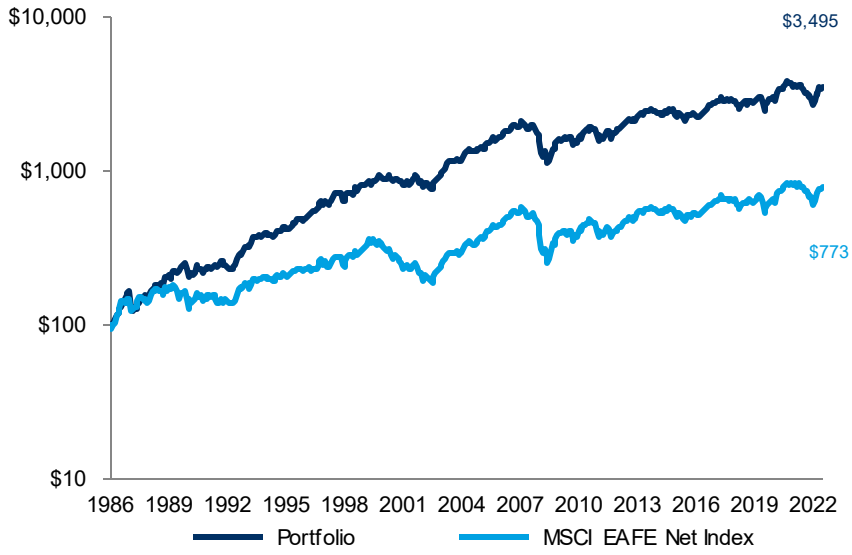
Rolling 3 Year Annualized Returns - Quarterly Data



- A measure of capital preservation in down markets
- Reasonable participation in strong up markets

... Underpins Long-Term Compounding

Value of $100 Today



Compound	Net
• Portfolio	10.2 %
• EAFE	5.8 %

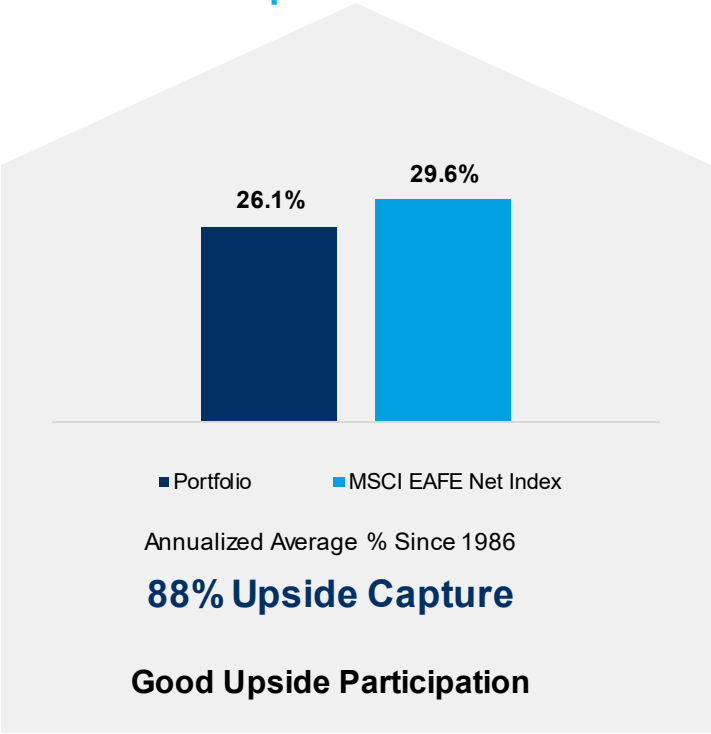
Source: Morgan Stanley Investment Management. The inception date for the International Equity Trust is September 30, 1986. . Growth of a dollar using a logarithmic scale. Each portfolio may differ due to specific investment restrictions and guidelines. Individual results will vary. Performance returns reflect the average annual rates of return. The investment returns are **Gross** of custody as well as investment management fees, in USD terms, and assume the reinvestment of all dividends and income. If expenses were deducted returns would have been lower. Investment returns and principal value will fluctuate and an investor's shares, when redeemed, may be worth more or less than their original cost. Performance returns are compared to those of an unmanaged index and are considered to be a relevant comparison to the Portfolio. Comparisons of performance assume the reinvestment of all dividends and income. Please refer to the standardized performance slide for additional information.

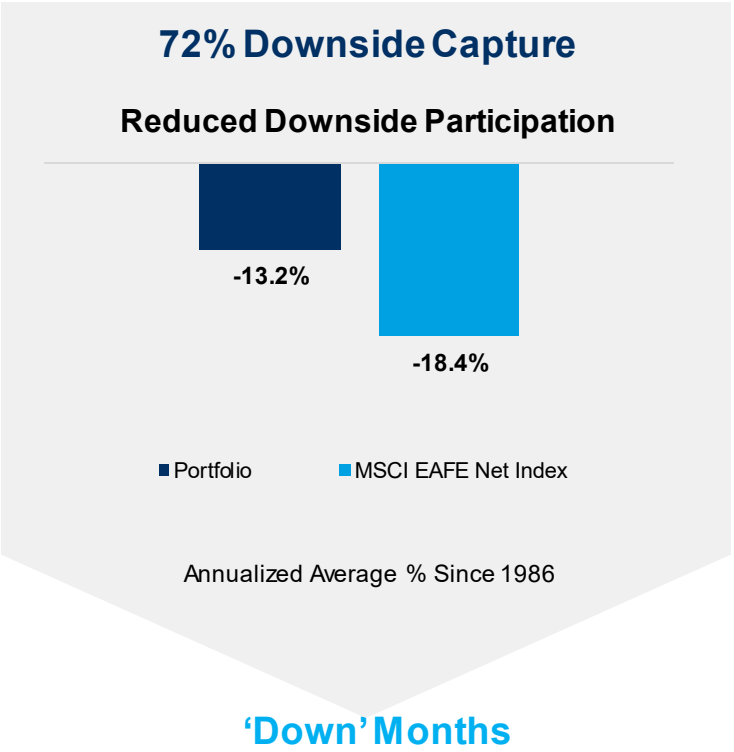
Portfolio has Delivered an Asymmetric Pattern of Performance

International Equity Trust - USD

Past performance is no guarantee of future results

'Up' Months





'Down' Months

Source: MSCI, Morgan Stanley Investment Management. Data as of March 31, 2023. The International Equity Trust's inception date is September 30, 1986. Returns may increase or decrease as a result of currency fluctuations. The comparison index is the MSCI EAFE Net Index with Net dividends reinvested. The Upside or Downside capture ratio measures the portfolio's performance relative to the market in up or down markets. A market is considered down if the return for the benchmark is less than zero and up if the return is greater than or equal to zero. The Downside Capture Ratio is calculated by dividing the portfolio's return during the down market periods by the return of the market during the same periods. The Upside Capture Ratio is calculated by dividing the portfolio's return during the up market periods by the return of the market for the same period. For periods greater than 1 year, returns are annualized. Updated quarterly. Please refer to the standardized performance slide for additional information.

Performance Returns

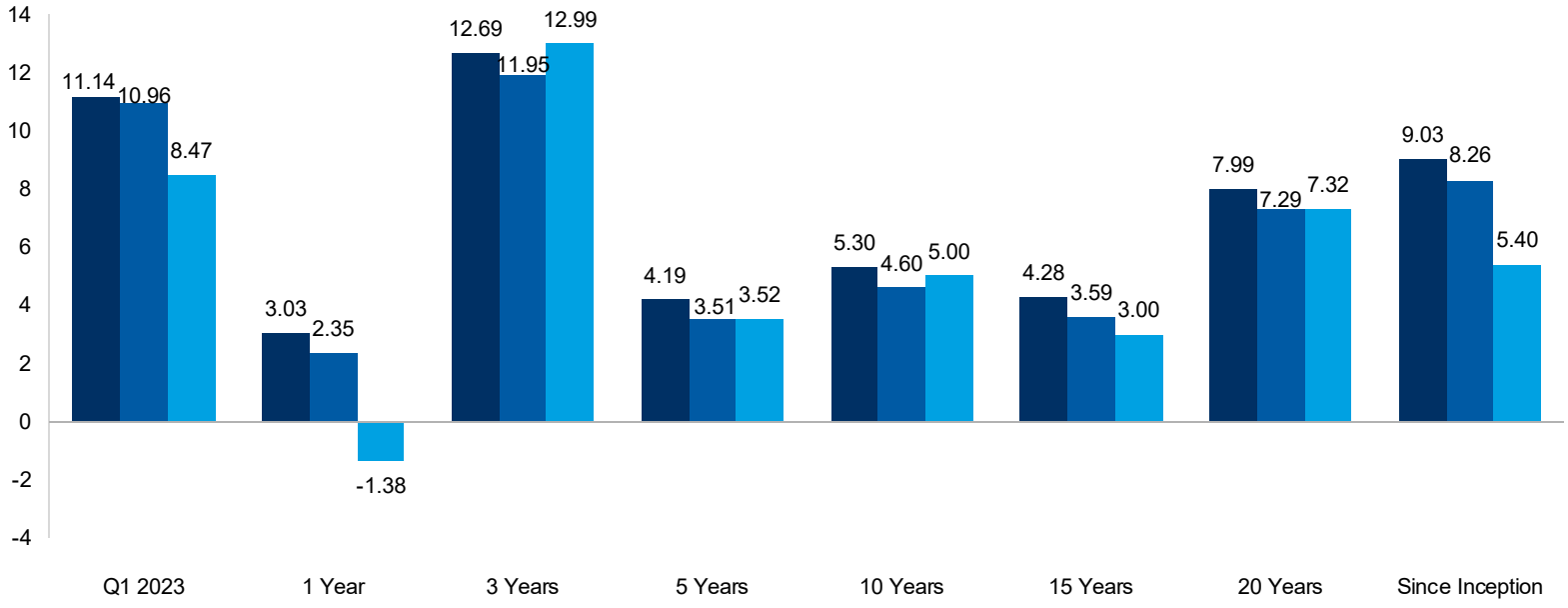
City of Fort Pierce Retirement and Benefit System

Data as of March 31, 2023 (%)

Past performance is no guarantee of future results

Inception Date: September 01, 1991

Market Value as of March 31, 2023: $23,199,348.73



Gross Excess Return	2.67	4.41	-0.30	0.67	0.30	1.28	0.67	3.63
Net Excess Return	2.49	3.73	-1.04	-0.01	-0.40	0.59	-0.03	2.86

Source: Morgan Stanley Investment Management. Performance returns reflect the average annual rates of return. Periods less than 1 year are not annualized. The returns shown are net of investment advisory/management fees, are quoted in USD and include the reinvestment of dividends and income. Performance returns are compared to those of the MSCI EAFE Net Index with Net dividends reinvested, which is an unmanaged market index and is considered to be a relevant comparison to the Portfolio. The index does not include any expenses, fees or sales charges. Comparisons of performance assume the reinvestment of all dividends and income. It is not possible to invest directly in an index.

Sector Attribution – 1 Year

International Equity Trust - USD

Top Five Absolute Contributors:

Safran	+73 bps
LVMH	+71 bps
SAP	+69 bps
Moncler	+61 bps
Carlsberg	+49 bps

Top Five Absolute Detractors:

Roche	-72 bps
Fresenius	-67 bps
Grifols	-60 bps
Barrick Gold	-59 bps
Teleperformance	-55 bps

Cumulative Returns from April 01, 2022 to March 31, 2023 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Consumer Staples	1.33	19.39	10.58	1.13	0.48	1.61
Financials	-1.41	19.88	18.37	0.71	0.16	0.87
Industrials	-0.62	18.69	15.26	0.60	0.14	0.74
Information Technology	-3.62	13.63	7.44	0.46	0.14	0.60
Real Estate	-20.39	--	2.74	--	0.57	0.57
Consumer Discretionary	4.98	6.88	11.46	0.55	-0.32	0.24
Communication Services	-6.82	1.24	4.71	-0.05	0.18	0.13
Utilities	-1.20	--	3.44	--	-0.00	-0.00
Materials	-6.53	2.12	7.74	-0.31	0.29	-0.02
Health Care	-2.64	11.60	13.49	-0.83	0.25	-0.58
Energy	9.60	3.33	4.78	-0.45	-0.26	-0.71
Cash	--	3.24	--	--	-0.01	-0.01
Total	**-1.38**	**100.00**	**100.00**	**1.81**	**1.63**	**3.44**

Source: Morgan Stanley Investment Management and FactSet.

1. Portfolio weight and MSCI EAFE Net Index are an average for the period. Attribution total return shows the impact to the portfolio's return; it is not representative of the portfolio's total return. Information shown is quoted in USD terms and include the reinvestment of all dividends and income. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
2. The 'Cash' line in the attribution includes cash balances as well as other cash instruments.
3. On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

This material has been prepared on the basis of publicly available information, internally developed data and other third-party sources believed to be reliable. Any third-party data or methodology used to derive such data is subject to change without notice. No assurance is provided regarding the reliability of such information and the Firm may not independently verify all information taken from public and third-party sources. The holdings identified do not represent all of the securities purchased, sold, or recommended for advisory clients. Each portfolio is actively managed; therefore, holdings referenced may or may not be currently represented in each portfolio.

Significant Movements in the Portfolio – 2022

International Equity Trust

Portfolio Turnover

2022: 32.13%

Major Transactions: January 1, 2022 – December 31, 2022

INITIAL PURCHASES	ADDITIONS	REDUCTIONS	FINAL SALES
Royal Dutch Shell[1]	Legrand	***Tencent***	Henkel
MTU Aero Engines[1]	***Samsung***	Novartis	United Overseas Bank
Carlsberg[1]	Infineon	BAT	Bayer
Worldline[1]	Prudential	RELX	SMFG
Teleperformance[1]	UBS	Fresenius	***Grifols***
SK Hynix	Deutsche Post	Sanofi	GlaxoSmithKline
St James' Place[1]	Knorr-Bremse	Pernod Ricard	M&G
Atlas Copco[1]	L'Oréal	Roche	Anglo American
Kone[2]	Svenska Handelsbanken	***AIA***	Cameco
KBC[1]	LVMH[3]	Thales	JD.com[5]
Tourmaline	ABF	***Constellation Software***	EuroAPI[6]
Partners Group[2]	Epiroc	Mowi	
Halma	TSMC	***Deutsche Boerse***	
	Hoya	***Imperial Brands***	
	Qiagen	Reckitt Benckiser	
	Shiseido	Barrick Gold[4]	
	Tryg	***LVMH***[3]	
	Moncler	Legal & General	
	Adidas	***Kirin***	
	Aristocrat	DBS	
	Safran	Fanuc	
	SAP	Hexagon	
	Barrick Gold[4]	Keyence	

Source: Morgan Stanley Investment Management All information is provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned. There is no guarantee that the securities shown, or holdings in general, will perform well. Holdings are subject to change. Significant movement is based on all new purchases and final sales and at least 20 basis points weight changes for other existing positions for the period shown. ***Companies in bold/Italics represent activity in Q4 2022.***

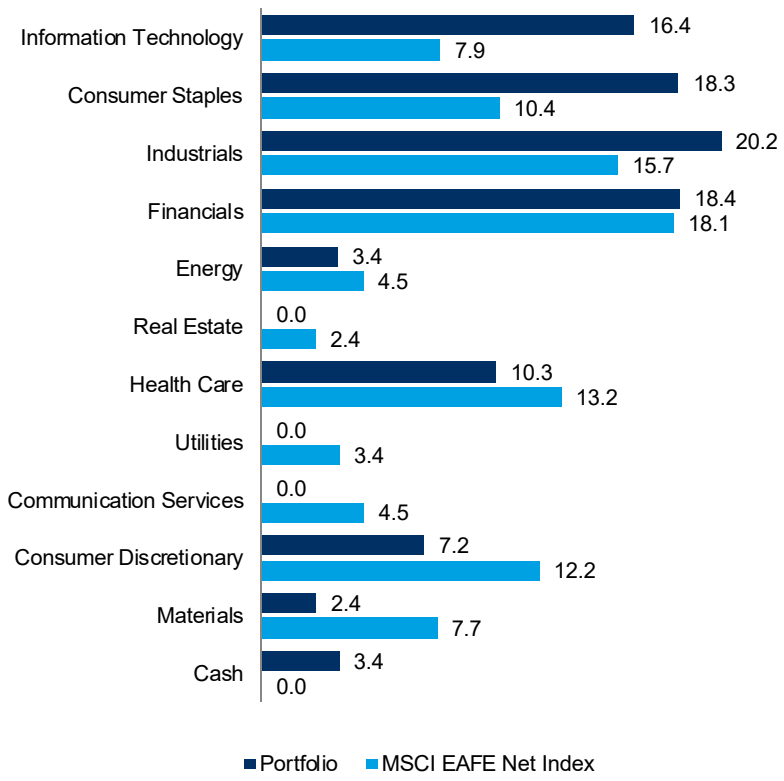
1. Initially purchased in Q1 2022 and added to during later quarters.
2. Initially purchased in Q2 2022 and added to during Q3 2022.
3. LVMH was added to in Q1 2022 and reduced in Q4 2022.
4. Barrick Gold was reduced in Q1 2022 and Q2 2022 and added to during Q4 2022.
5. Special dividend received from Tencent and was sold in Q1 2022. Position size was <10bps.
6. Spun out of Sanofi and sold in Q2 2022. Position size was <5bps.

Portfolio Remains Defensively Positioned

Sector weights result from bottom-up stock selection process

Sector Weightings

International Equity Trust, data as of March 31, 2023



Sector	Largest Securities
Information Technology	SAP, Constellation Software, Samsung Electronics
Consumer Staples	Heineken, Reckitt Benckiser, Carlsberg
Industrials	Deutsche Post, RELX, Safran
Financials	AXA, Prudential, Svenska Handelsbanken
Energy	Shell, Tourmaline
Health Care	AstraZeneca, Sanofi, Hoya
Consumer Discretionary	Moncler, LVMH, Adidas
Materials	Barrick Gold

- Overweight defensive sectors (32.1% vs. 27.0%)
- Underweight cyclical sectors (67.9% vs. 73.0%)

Source: Morgan Stanley Investment Management. Sector weightings are provided for informational purposes only and should not be deemed as a recommendation to buy or sell securities mentioned or securities within the sectors shown. Up to the three largest holdings are stated for each sector. Holdings and weightings are subject to change.
On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

Top Ten Skewed Towards Defensive Quality Sectors

International Equity Trust - USD

SECURITY	INDUSTRY	COUNTRY	(%)
SAP	Software & Services	Germany	3.4
Constellation Software	Software & Services	Canada	2.9
Heineken	Food, Beverage & Tobacco	Netherlands	2.8
Samsung Electronics	Technology Hardware & Equipment	South Korea	2.7
Shell	Energy	United Kingdom	2.7
Reckitt Benckiser	Household & Personal Products	United Kingdom	2.7
TSMC	Semiconductors & Semiconductor Equipment	United States	2.4
Barrick Gold	Materials	Canada	2.4
Deutsche Post	Transportation	Germany	2.3
RELX	Commercial & Professional Services	Netherlands, United Kingdom	2.3
Total			**26.7**

Source: Morgan Stanley Investment Management. Data as of March 31, 2023. Subject to change daily. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries and countries shown above.

Indirect Exposure to the Right Kind of Emerging Market Growth

Focus on Revenue Exposure not Listed Exposure

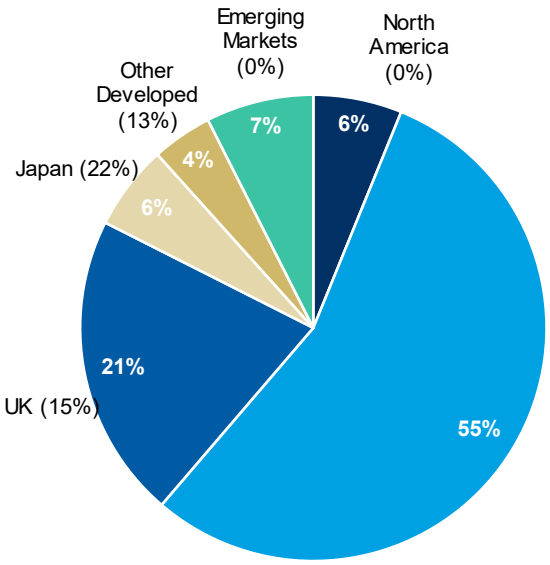
- Where a company does business is more important than where it is listed
- Country weights are a residual of our bottom up stock selection

Selected Company EM Exposure[3]

Minth	60%
Epiroc	54%
Teleperformance	52%
Pernod Ricard	51%
Infineon	50%
Prudential	50%
Samsung	50%
AIA	50%
Shiseido	49%
Atlas Copco	48%
Barrick Gold	47%
SMC	47%
Kone	45%
LVMH	44%
L'Oréal	43%
Heineken	42%

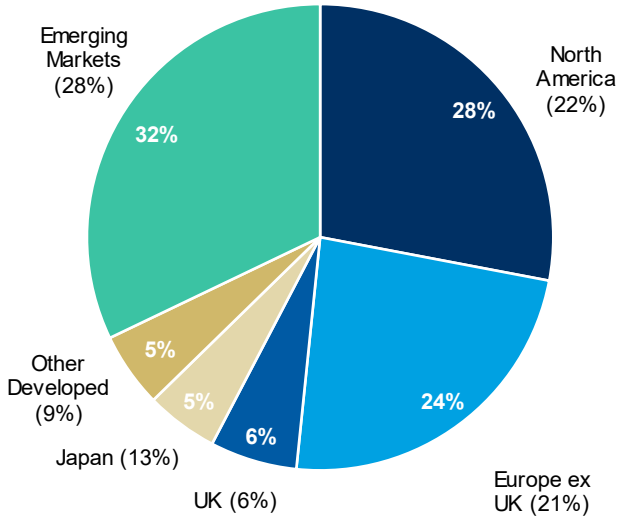
Regional Breakdown: MSCI Country[1]

International Equity Trust
(MSCI EAFE Net Index)



Revenue Exposure[2]

International Equity Trust
(MSCI EAFE Net Index)



Source: MSCI, FactSet and Morgan Stanley Investment Management. Data as of March 31, 2023. Subject to change. Updated quarterly.

1. Regional Breakdown excludes cash and rebalanced to 100%.
2. Weighted Regional Exposure – Percentage of Company Sales. Excludes cash and rebalanced to 100%. Unassigned stocks are excluded from the index and may not add up to 100%.
3. Securities shown are for illustrative purposes only and should not be deemed as a recommendation to purchase or sell the securities mentioned or securities within the regions shown. The percentages represent the weighted average based on revenues from emerging market sales over 35%.

This portfolio is actively managed, therefore holdings may not be current. Each portfolio may differ due to specific investment restrictions and guidelines. The securities identified do not represent all of the securities purchased, sold, or recommended for advisory clients. Investors should not assume that investments in the securities identified and discussed were or will be profitable.

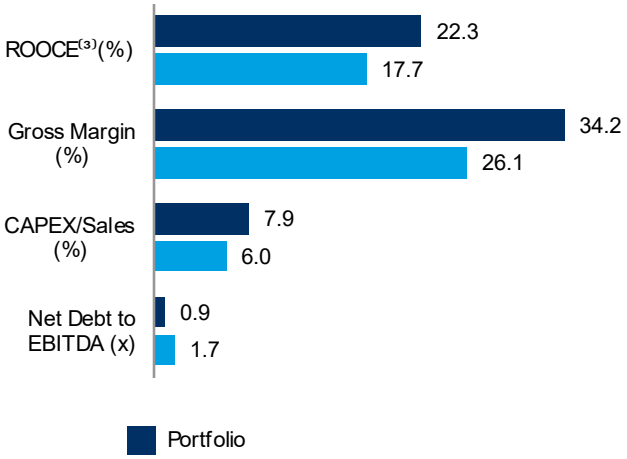
Higher Quality Portfolio, at a Reasonable Valuation

International Equity Trust - USD

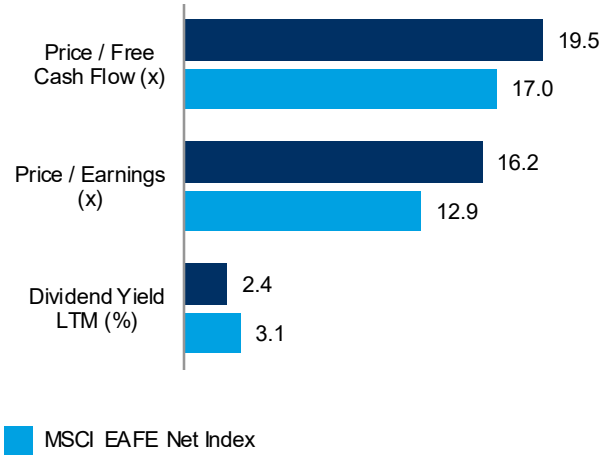
- Portfolio's Forward Earnings vs market is likely to be lower than shown, as market's forward earnings estimates are unreliable, often overstated.
- Market has higher gap between reported (GAAP/IFRS) and adjusted or "greed" earnings than the portfolio.
- High quality companies are better at converting earnings to cash. Free Cash Flow is a better indicator of valuation.

Past performance is no guarantee of future results

Quality Ratios– Historical[1,2,3]



Valuation Ratios[1,2,3]

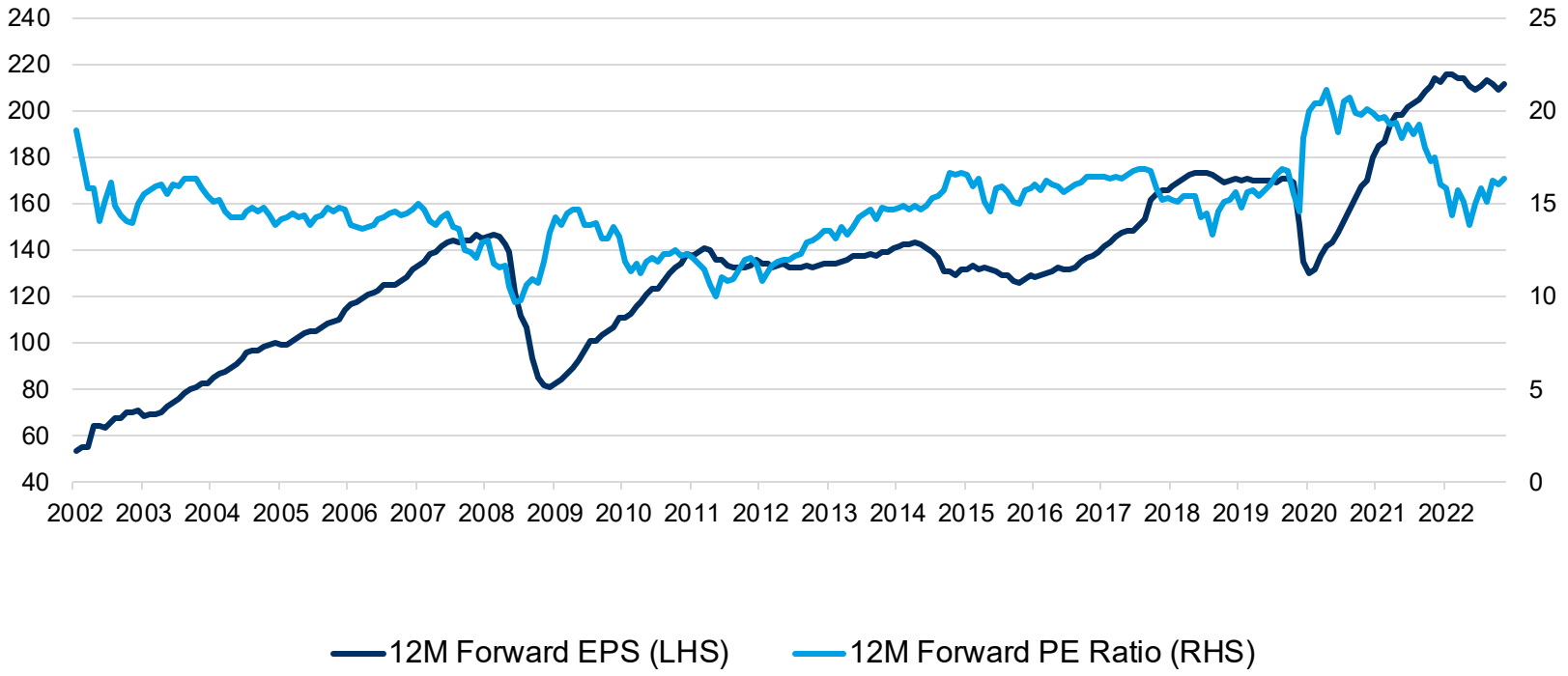


Market Cap Weights	Portfolio %	MSCI EAFE Net Index %
Mega Cap > $100 Bn	24	28
Large Cap > $50 - 100 Bn	24	21
Mid Cap > $10 - 50 Bn	49	41
Small/Mid Cap > $1 - 10 Bn	4	10
Weighted Average Market Cap ($Bn)	83.9	85.7

Source: Morgan Stanley Investment Management FactSet / Worldscope/MSCI. Data as of March 31, 2023. There is no guarantee that forecasts and estimates will come to pass due to changing market and economic conditions Provided for informational purposes only and is subject to change on a daily basis. Each portfolio may differ due to specific investment restrictions and guidelines. Thus, individual results could vary. MSCI EAFE Net Index shown for comparative purposes only. Subject to change daily. Please refer to the standardized performance slide for additional information.
1. Portfolio data as of ROOCE (Return on Operating Capital Employed) = EBITA (Earnings Before Interest, Taxes and Amortization) / PPE (Property, Plant, Equipment) + Trade working capital (excludes goodwill). Ex-Financials.
2.ROOCE, Gross Margin, Capex/Sales, and Net Debt to EBITDA use last reported ex- Financials data. Dividend Yield uses last reported including Financials data. The Price/Earnings ratio and Price/Free Cash Flow use FactSet Consensus 12 month forward earnings and free cash flow per share data. Characteristics are calculated using the underlying companies in the Portfolio. There is no guarantee that any portfolio will necessarily yield similar results over the next year.
3.Ratio methodology: MSCI EAFE Net Index: sum(shares in index * numerator per share)/sum(shares in index * denominator per share). Portfolio: sum(shares in portfolio * numerator per share)/sum(shares in portfolio * denominator per share).

Q1 Gains Were A Re-Rating as Earnings Were Flat

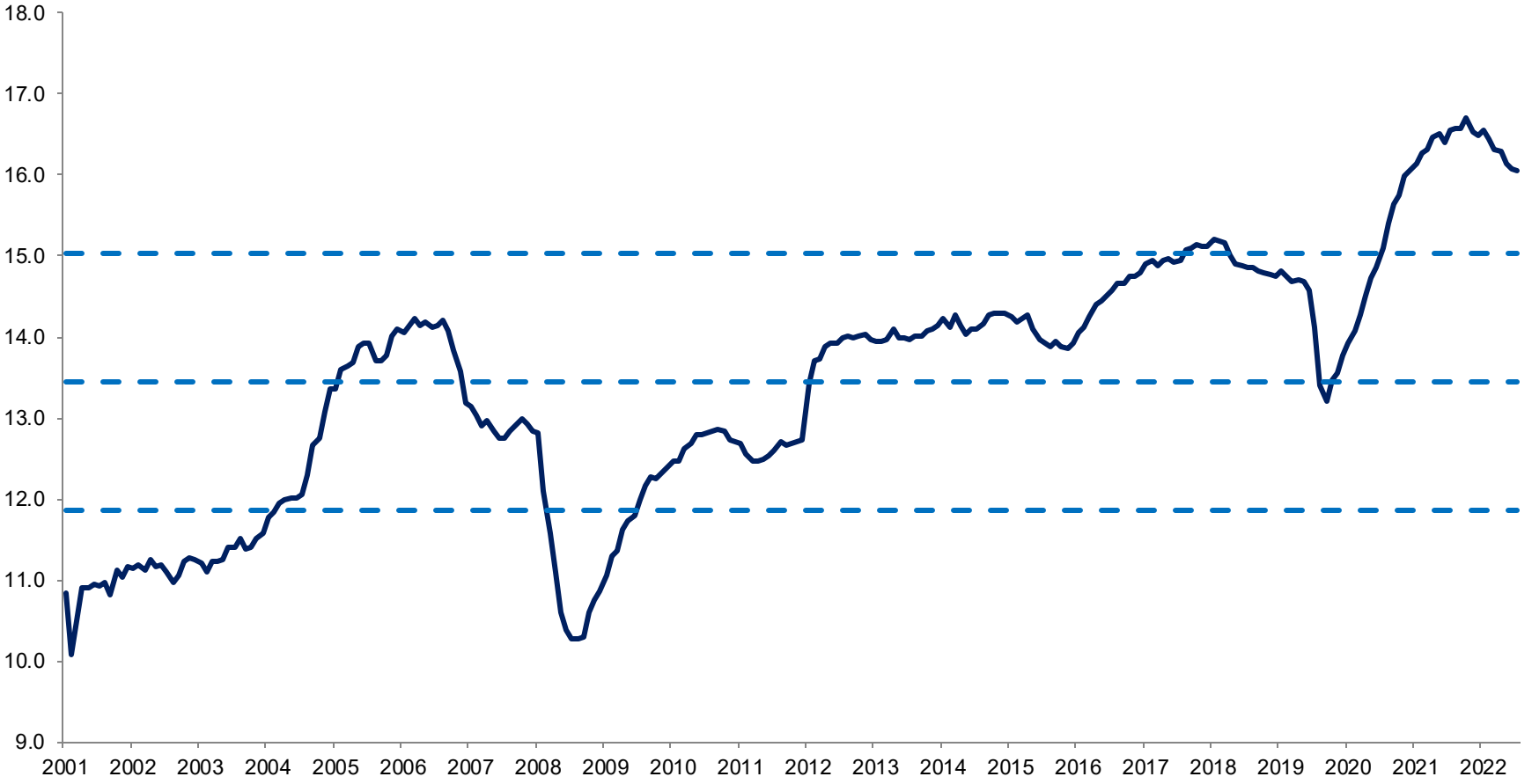
MSCI World 12 Month EPS Expectations Forward and 12 Month Forward PE



Source: FactSet. Data as of March 31, 2023.

Margins Still remain High... and Thus Vulnerable

MSCI World – 12 Month Forward EBIT Margin



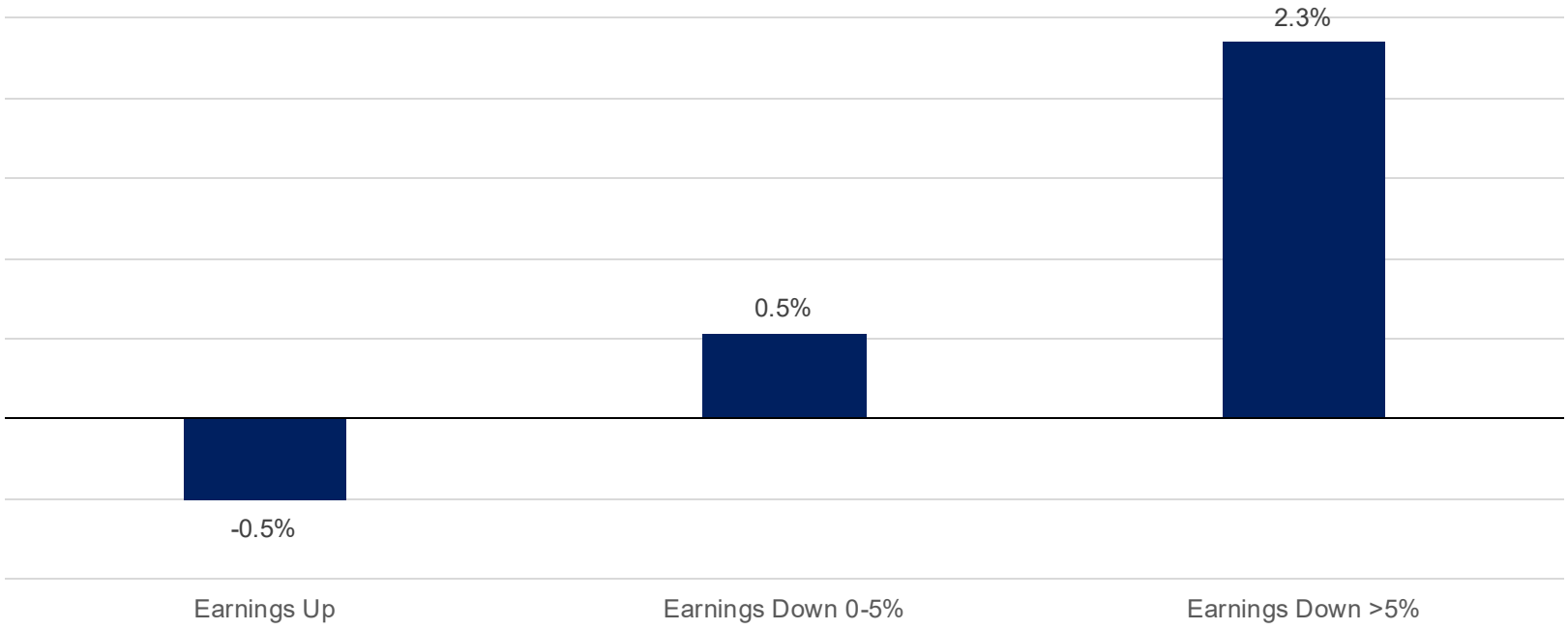
Source: FactSet. Data as of March 31, 2023.

International Equity Relative Performance Driven by Direction and Magnitude of Change in Earnings

Average QoQ Total Return Relative to the Index

International Equity Trust vs. MSCI EAFE

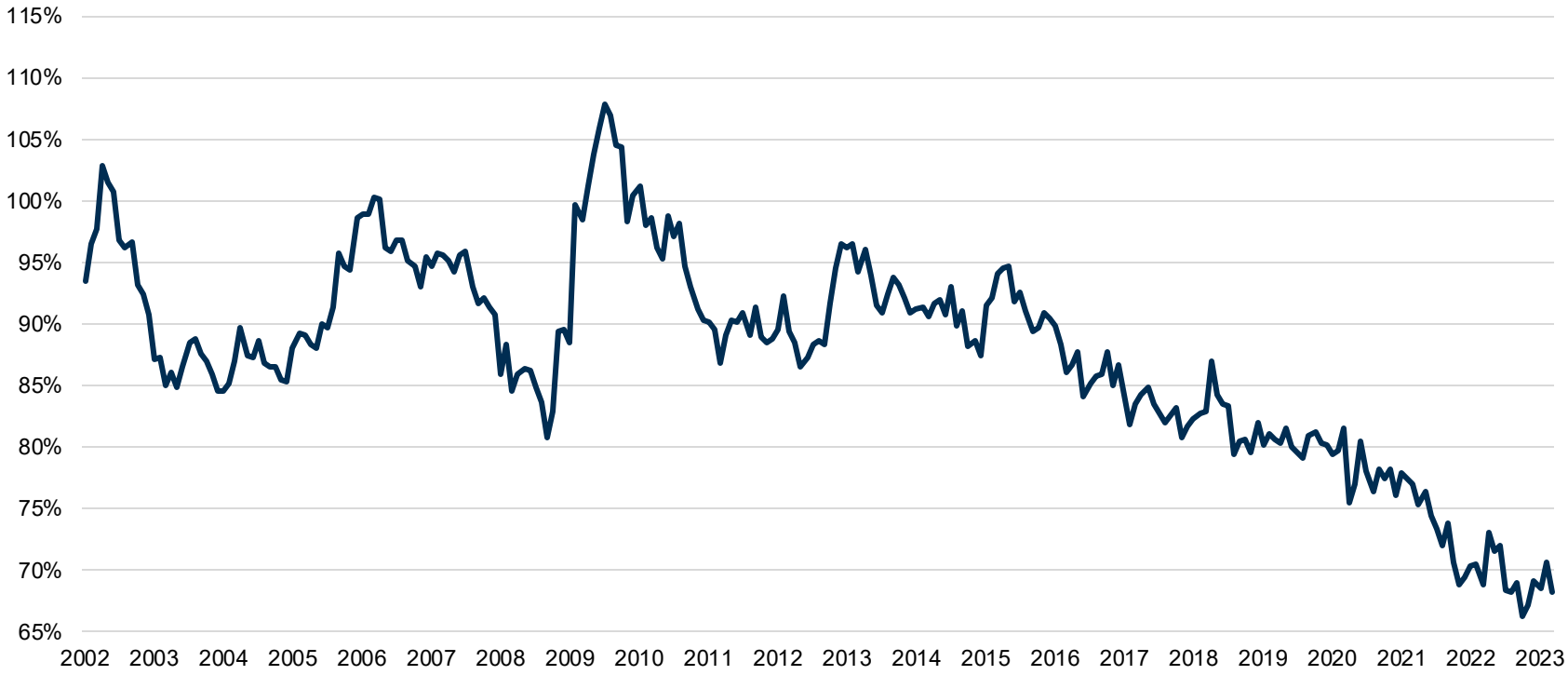
Data from June 2003 to March 2023



Source: FactSet. Data as of March 31, 2023. The inception date of the International Equity Trust is September 30, 1986.

EAFE Remains Cheap Versus the US

Relative 12 Month Forward PE: MSCI EAFE vs MSCI USA



Source: FactSet. Data as of March 31, 2023

Our Outlook Remains Cautious

- **Market seems to be pricing in an optimistic scenario**
  - MSCI World multiple has re-rated over the last two quarters from 13.7x to 16.2x the next 12 months' earnings, 14% above the 2003-19 average with earnings flat
  - Earnings expected to be resilient, with 2% rise in 2023 and 10% in 2024, and forward margins at 16.1% are still close to peaks, and well above the 15.2% pre-COVID high
  - Neither multiples nor earnings seem to be discounting any kind of recession
- **Markets have been helped by good news in Q1**
  - Warm winter and China reopening have helped 2023 economic growth forecasts
  - Disinflation in goods prices as shortages and supply chain issues ease
- **Situation still uncertain: Reckoning may be deferred rather than avoided**
  - US labor markets remain tight with unemployment below 4% and vacancies hard to fill, so wage pressure remains
  - Impact of near 5% rise in US rates yet to be fully felt by the economy
  - Multiple leading indicators, such as tightening lending standards, warn of potential recession, and expected 2024 growth rates falling
- **Earnings at risk from both margin normalization and any economic downturn**
- **Both pricing power and recurring revenues are again likely to become more evident and valuable in the case of any slowdown**
  - Inflation: will the pricing environment change as shortages ease?
  - Pricing power, underpinned by brands, networks or mission-critical products, allow companies to pass on input costs to customers
  - Recurring revenues, due to purchasing habits or subscription models, protect top-line in any slowdown
- **MSCI EAFE remains at a significant 30% discount to MSCI US which may limit downside risk**
  - EAFE has actually out-earned the USA since the end of 2021

Quality focus should offer resilient earnings at reasonable relative valuations

Source: Morgan Stanley Investment Management, FactSet. As of March 31, 2023. The views and opinions expressed herein are those of the portfolio management team, are not representative of the Firm as a whole, and are subject to change at any time due to market or economic conditions. There is no assurance that a portfolio will achieve its investment objective or an investment strategy will work under all market conditions.

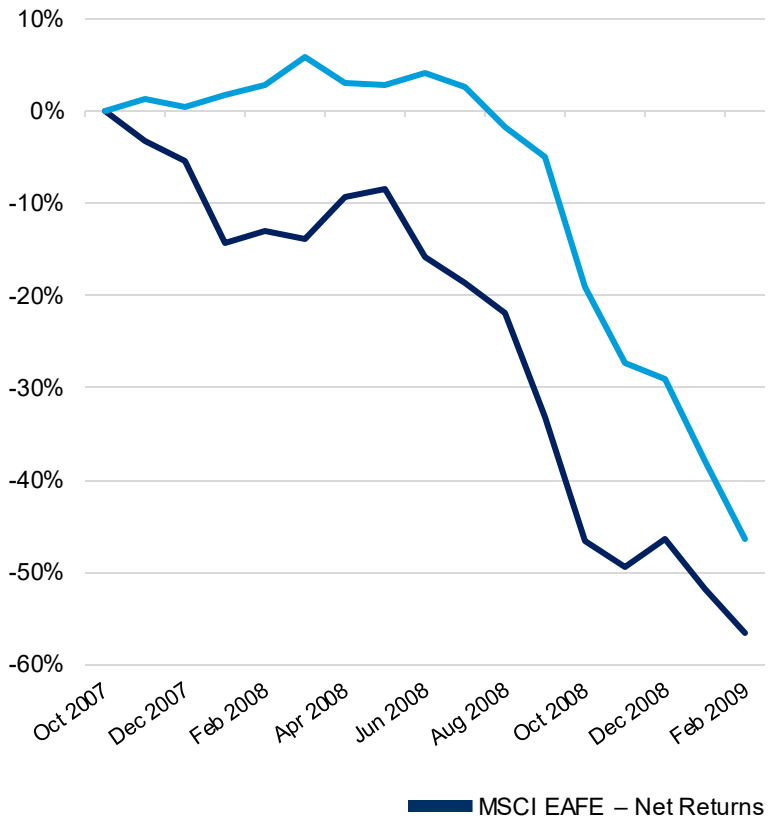
Morgan Stanley

INVESTMENT MANAGEMENT

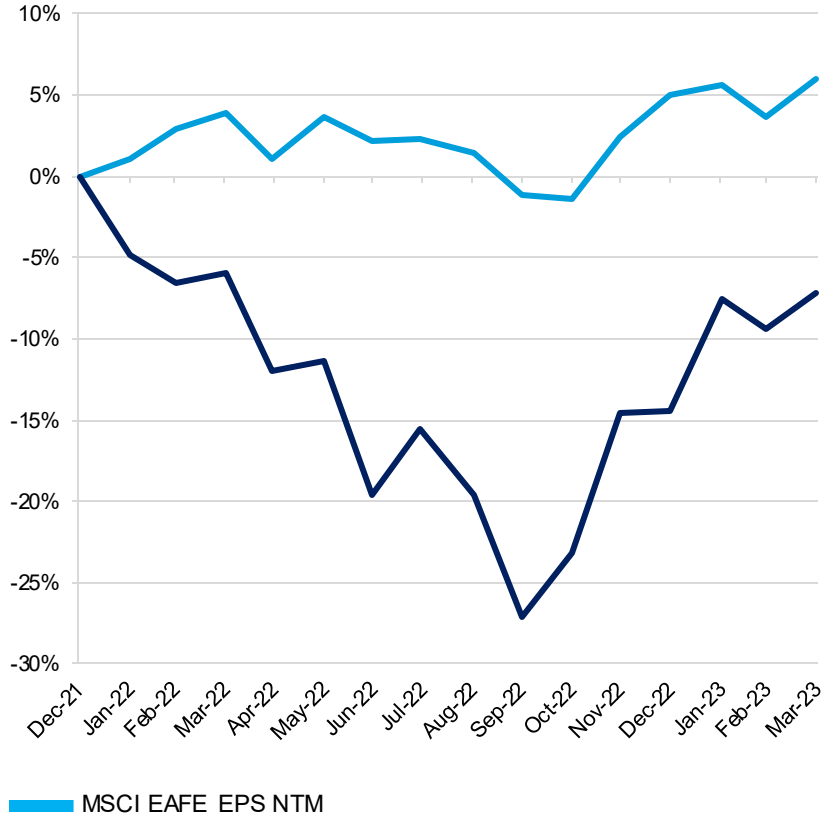
Appendix

Earnings Peaked 8 Months After Markets in GFC

MSCI EAFE Returns and Forward EPS in Global Financial Crisis



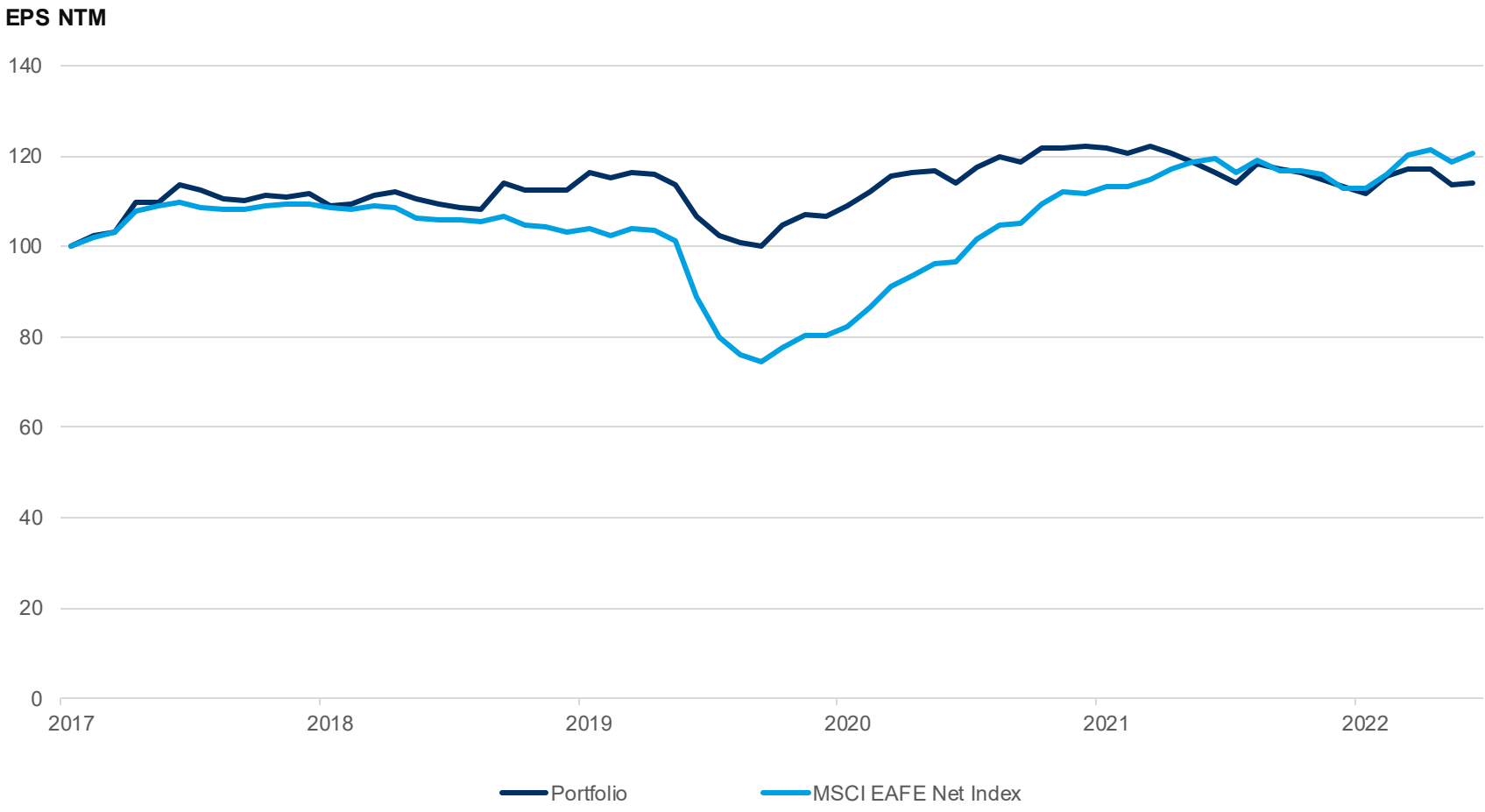
MSCI EAFE Returns and EPS



Source: Factset. Data as of March 31, 2023.

Benefits of Quality Bias Have Shown Up in Robustness of Earnings

International Equity Trust - USD



Source: FactSet. Data as of March 31, 2023. Past performance should not be construed as a guarantee of future performance.

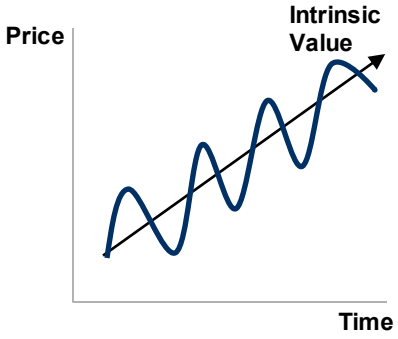
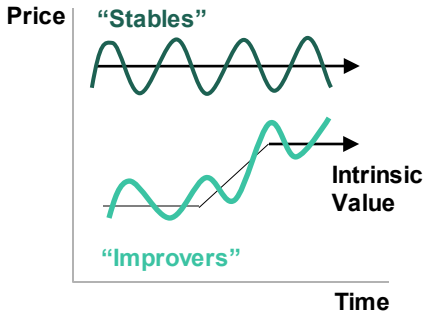
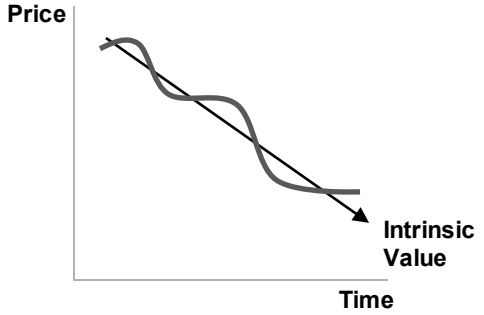
How We Are Different From the Market

International Equity Team	Market
✓ Sustainably Long-Term	✓ Tactically Short-Term
✓ Absolute Risk	✓ Relative Risk
✓ Cash Based	✓ Earnings Based
✓ Returns Focused	✓ Growth Fixated
✓ Downside-averse	✓ Chasing Upside

Our genuine long-term view and focus on price & prospects give us the flexibility to exploit both high quality and value opportunities in a time proven process

Source: Morgan Stanley Investment Management. The views and opinions expressed herein are those of the portfolio management team, are not representative of the Firm as a whole, and are subject to change at any time due to market or economic conditions. There is no assurance that a portfolio will achieve its investment objective or an investment strategy will work under all market conditions.

How We Categorize Businesses

	High Quality Compounders	Value Opportunities	Value Traps
			
QUALITY	• Sustainable high returns on capital due to intangible assets • Low volatility and cyclicality • Management dedicated to preserving returns on capital	• Reasonable to improving returns on capital due to management actions or cyclical tailwinds • Low probability of failure • Management looking to improve returns on capital (if poor) and preserve returns on capital (if good)	• Deteriorating returns on capital • Management unable / unwilling to improve returns on capital • Company fails minimum quality threshold – High risk of failure / binary bets – No prospect of acceptable returns
PRICE	• Fair value or better	• Enough of a discount to intrinsic value to compensate for absolute risk	• Avoid at any price
OUR OPPORTUNITY	• Longer time horizon than the market	• Disagreement with the market on shape of cycle or size of restructuring opportunity • Longer time horizon than market	• Not owning can be as important as owning

Source: MSIM. For illustrative purposes only. There is no guarantee any security within each category will perform as outlined above.

Combining Compounders and Value Opportunities Should Deliver Outperformance Over the Long Term

- EAFE Index does not care about quality or price
- Both investment approaches, used separately, should give higher returns than the EAFE index in the long term
- Combining the two approaches, subject to price and prospects, should give asymmetric profile and long term outperformance

	HOLD HIGH QUALITY COMPOUNDERS	EXPLOIT VALUE OPPORTUNITIES
RISK / REWARD	• Lower Absolute Risk of Companies = Lower Margin of Safety Required • Lower volatility • Smaller universe of potential candidates	• Higher Absolute Risk of Companies = Price and Prospects Critical to Determine Margin of Safety Required • Higher volatility but can be offset by price • Larger universe of potential candidates
BUY DECISION	• If bought at a discount to fair value, initial close-up of discount gives good upside • If bought at fair value, underlying compounding drives intrinsic value past fair value over time	• Close-up of discount to fair value or overshoot gives substantial upside • Need constant source of new value opportunities as investment ideas mature
SELL DECISION	• Sustained High Returns = Superior Long Term Compounding • Hold unless price gets too expensive	• Initial buying of changed path of returns gives accelerated returns • Normalised Mediocre Returns = Mediocre Long-Term Compounding • Sell when returns normalise and price adjusts to reflects this • Move on to next opportunity

The Portfolio has a Substantial Quality Bias

International Equity Trust - USD

- Quality bias mainly comes through holdings of High Quality Compounders but Value Opportunities are also higher quality than Index.
- Current heavy skew towards High Quality Compounders versus history:
  - Absolute valuation of High Quality Compounders reasonable at roughly intrinsic value
  - Low "margin of safety" a worry given valuations in lower quality areas for Value Opportunities
  - Given macro, tough to find improving businesses in lower quality sectors

	High Quality Compounders[1]	Value Opportunities[1]	Total Portfolio[1]	MSCI EAFE Net Index[1]
Portfolio Weight %	52% (58%*)[2]	26% (39%*)[2]	--	--
ROOCE[3] %	38%	17%	22%	18%
Gross Margin %	49%	24%	34%	26%
Capex / Sales %	6%	9%	8%	6%
Net Debt / EBITDA	1.05	0.7	0.88	1.67

Data as of March 31, 2023
1. Excluding Financials, apart from portfolio weight in parenthesis
2. Value Opportunities 26% excluding Financials; 39% including Financials (*Some financials in High Quality Compounders: AIA, Prudential)
3. ROOCE is Earnings Before Interest and Taxes (EBIT) / Property Plant and Equipment (PPE) + trade working capital (excludes goodwill)
For illustrative purposes only. There is no guarantee any security within each category will perform as outlined above.

Investment Process

Active Ownership

5 ACTIVE OWNERSHIP

Ongoing

Test investment thesis with management

- Direction of returns
- Developing opportunities or threats
- Capital allocation intentions
- Incentive structure changes
- Material ESG developments & direction
- Management changes

Proxy Voting & Engagement

– not outsourced

Event driven

Assess materiality and management action

- Capital allocation
  - What?
  - Why?
  - Impact?
- Material event
  - What?
  - Why?
  - Impact?
  - Fix?

6 SELL DISCIPLINE

- No sale is automatic
- Does valuation exceed intrinsic or fair value?
- A negative development for the investment thesis?
- A source of funding for new, better ideas?

Meet weekly to review portfolio and stock ideas

The information presented represents how the portfolio management team applies their investment process under normal market conditions.

Risk Management

Seek to Minimize Risk of Permanent Destruction of Capital

- We worry about absolute risk – permanent loss of capital – not relative risk
- We believe that cap-weighted benchmarks are inherently risky

Risks We Worry About

Overpayment

Business risk

- What can go wrong?
- Have we got the competitive landscape right?
- Have we assessed capital intensity correctly?
- Are we right on the cycle?
- Is there long term stakeholder alignment?

Changing regulatory environment / industry dynamics / government threats / material ESG risk

Financial risk

Management actions and motivations

Overall portfolio diversification

Risks We Don't

Tracking error

Missing out on latest investment trend

Short term "noise"

Risk management implies an effort to monitor risk but should not be confused with and does not imply low risk.

ESG and Sustainability

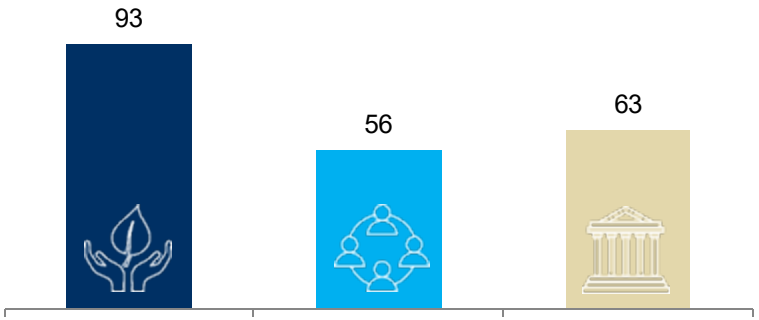
- Our investment process focuses on the **sustainability and direction of future returns** because we believe companies with sustained high long-term returns are expected to outperform.
- ESG is an integral part of risk management and the assessment of long-term sustainability of returns
  - **Environmental** can impact government/regulatory risks
  - **Social** can affect reputational risk with customers and/or governments
  - **Governance** in our opinion is the cornerstone of sustainable returns – without it, all else fails
- We believe that this is so important that the team has **engaged directly with companies on issues of sustainability and governance for over 20 years** rather than outsourcing the process.
- Our bottom-up stock picking approach including the use of MSCI ESG data, Sustainalytics and access to management enable us to **review material ESG issues at the company level and engage** where relevant
- We believe our approach **focuses on issues that could threaten company fundamentals** and/or the sustainability of returns.

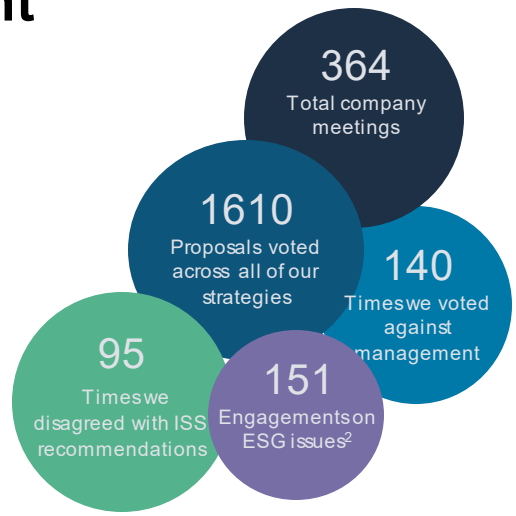
Strategies that incorporate impact investing and/or Environmental, Social and Governance (ESG) factors could result in relative investment performance deviating from other strategies or broad market benchmarks, depending on whether such sectors or investments are in or out of favor in the market. As a result, there is no assurance ESG strategies could result in more favorable investment performance. Any portfolio risk management processes discussed include an effort to monitor and manage risk, but should not be confused with and do not imply low risk or the ability to control risk. References to investment objectives or other goals the strategy seeks to achieve are inspirational only and should not be considered a guarantee that such results will be achieved.

We Engage Directly And Often With Management

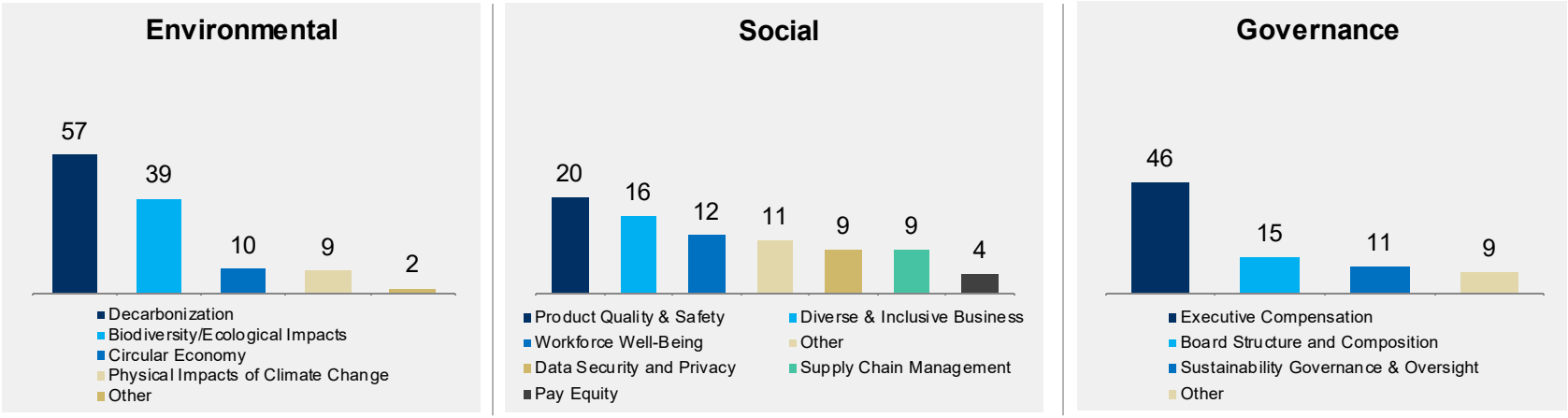
Engagement is Our Edge

Number of engagements on ESG-related topics, in the last 12 months[1]





Topics addressed during our engagements, in the last 12 months[1]



Source: Morgan Stanley Investment Management. Data shown is December 31, 2022. Reflects data at the time of publication. Updated semi-annually.

1. Total count of ESG topics is higher than total number of ESG engagements as more than one topic may be discussed in a meeting.
2. The International Equity Team defines an engagement as an interaction with senior management or nonexecutive board members.

Significant Movements in the Portfolio – Q1 2023

International Equity Trust

Portfolio Turnover

Q1: 7.46%

Major Transactions: January 01, 2023 – March 31, 2023

INITIAL PURCHASES	ADDITIONS	REDUCTIONS	FINAL SALES
SMC	Pernod Ricard	KBC	Fanuc
	Qiagen	Prudential	Fresenius
	Samsung	Associated British Foods	Tencent
	Roche	LVMH	Lumine[1]
	Heineken	Kirin	Meituan[2]
	RELX	Safran	
	Tryg	Deutsche Boerse	
	Hoya	RELX	
	Astra Zeneca	Moncler	
	Carlsberg	MTU Aero Engines	
	Barrick Gold		
	Deutsche Boerse		
	Partners Group		
	Shell		
	Svenska Handelsbanken		

Source: Morgan Stanley Investment Management. All information is provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned. There is no guarantee that the securities shown, or holdings in general, will perform well. Holdings are subject to change. Significant movement is based on all new purchases and final sales and at least 25 basis points weight changes for other existing positions for the period shown.

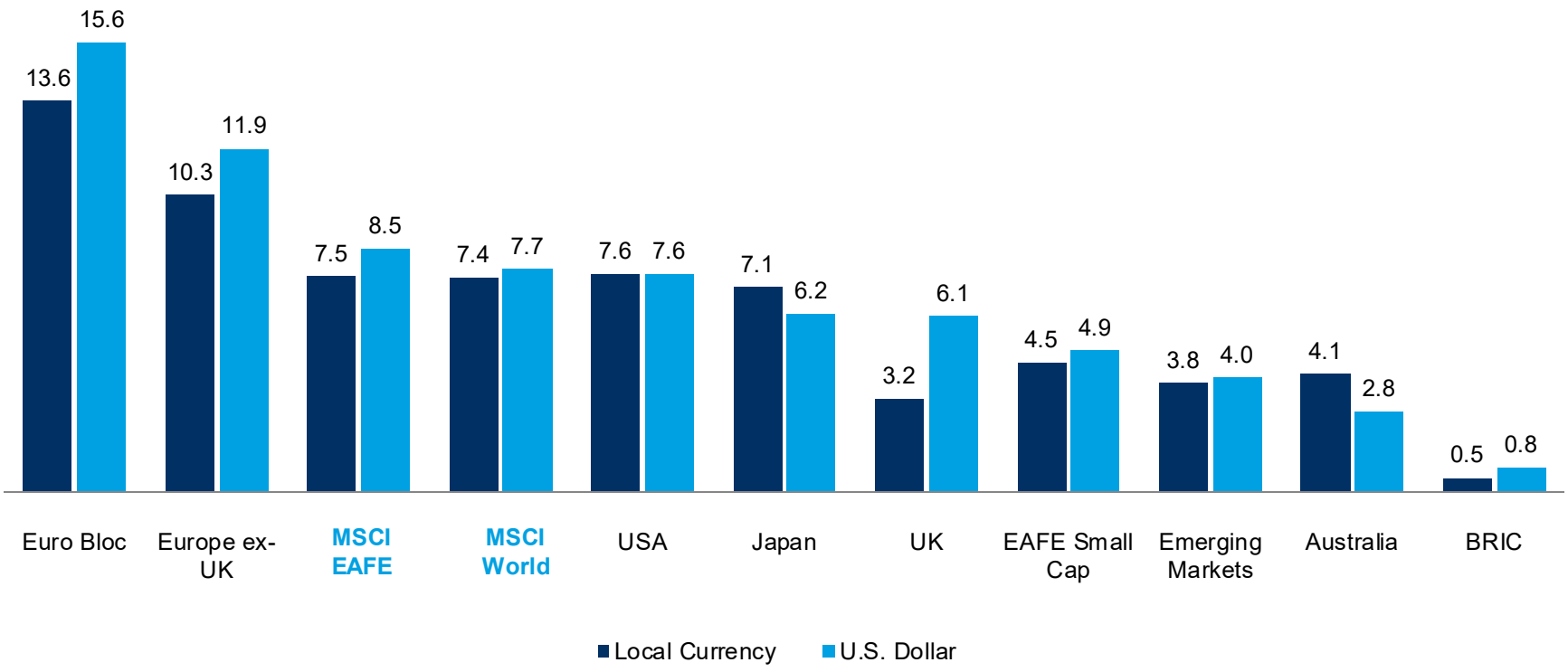
1. Lumine was spun out of Constellation Software. Position size <10bps
2. Meituan was spun out of Tencent. Position size 1bp

Q1 Was Another Strong Quarter For Markets

MSCI Net Official Indices Performance by Country

(%)

Past performance is no guarantee of future results



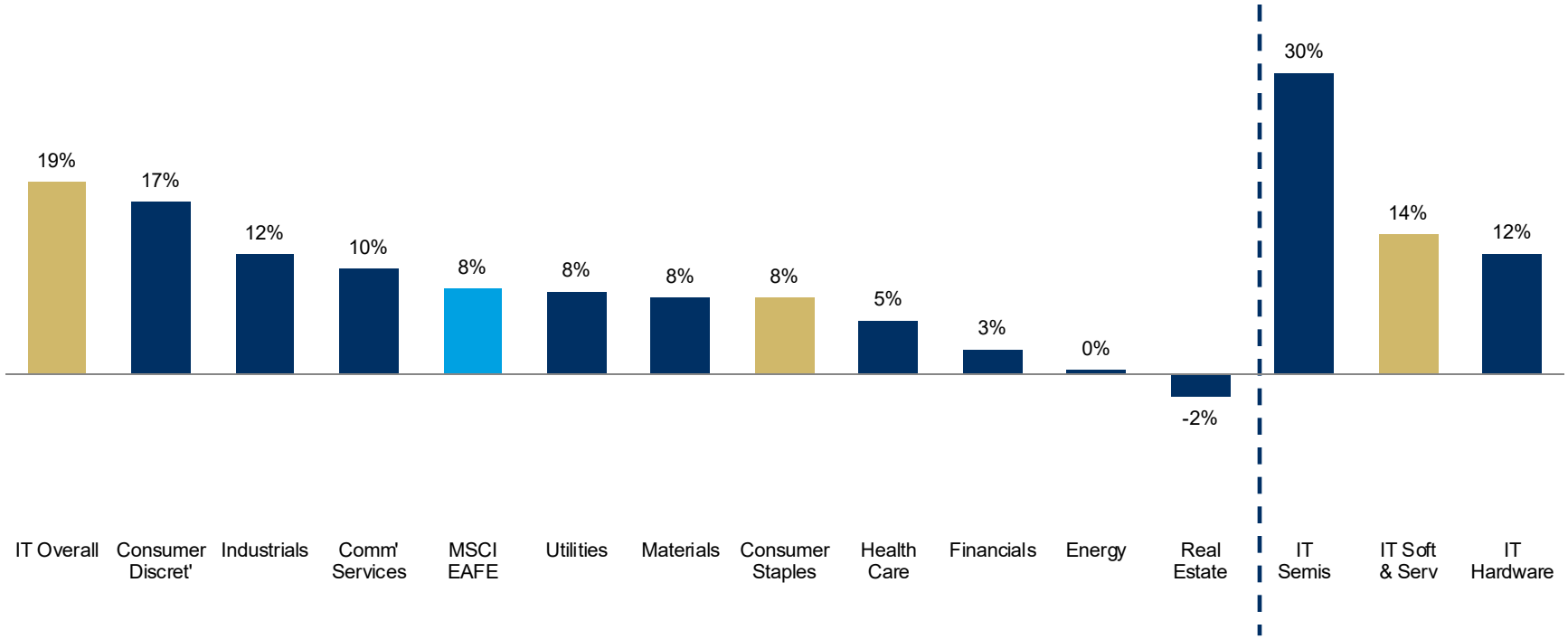
Source: FactSet. Data as of March 31, 2023. For illustrative purposes only and should not be deemed as a recommendation to buy or sell securities in the regions shown. It is not possible to invest directly in an index.

The Expensive Sectors that Lagged in 2022 Were Strongest in Q1

MSCI EAFE Indices Performance by Sector

(%)

Past performance is no guarantee of future results



Source: FactSet. Data as of March 31, 2023. Quoted in USD. Chart shown for illustrative purposes only.
On March 17 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified.

Consumer Staples Weights Dissected

International Equity Trust - USD

- 13% of staples portfolio is invested in industries outside the classic staples ones. Namely:

  Apparel retailing (ABF)[1]

  Pharmaceuticals (Kirin)[2]

  Fish farming (Mowi)[3]

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Beverages	2.2	8.0	Heineken, Carlsberg, Pernod Ricard, Kirin
Personal Care Products	2.1	2.9	Shiseido, L'Oréal
Household Products	0.7	2.7	Reckitt Benckiser
Tobacco	0.8	2.6	Imperial Brands, BAT
Food Products	3.3	2.2	ABF, Mowi
Consumer Staples Distribution & Retail	1.4	--	
	10.4	**18.4**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries shown above. On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

1. ABF is 1.8% of the Portfolio. Whilst the stock is categorized by MSCI as a Consumer Staple company, the majority of the company is Apparel retailing.
2. Kirin is 0.9% of the Portfolio. Whilst the stock is categorized by MSCI as a Consumer Staple company, approximately 11% of the company is Pharmaceuticals.
3. Mowi is 0.4% of the Portfolio. Whilst the stock is categorized by MSCI as a Consumer Staple company, the majority of the company is Fish farming.

Health Care Weights Dissected

International Equity Trust - USD

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
"Big 6" Pharmaceuticals[1]	5.3	6.6	AstraZeneca, Sanofi, Roche Holding, Novartis
Health Care Equipment & Services	2.4	2.3	Hoya, Alcon
Life Sciences	0.6	1.4	Qiagen
Other Pharmaceuticals	3.9	--	
Biotechnology	0.9	--	
	13.2	**10.3**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries shown above. On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.
1. Defined as Roche, Novartis, AstraZeneca, Sanofi, GlaxoSmithKline, Bayer

Financials Weights Dissected

International Equity Trust - USD

- Remain underweight banks. Our strategy remains choosy and opportunistic. Few bank franchises can beat their cost of capital – de-levering and forced alterations to the business model require a heavy discount to account for the considerable risks
- Overweight insurers given their limited solvency, liquidity and regulatory risks. Wary of exposure to vulnerable sovereigns and low long-run interest rates

FINANCIALS WEIGHTINGS	MSCI EAFE Net Index (%)	PORTFOLIO
Banks	9.2	3.8
Capital Markets	2.7	4.9
Financial Services	1.2	1.6
Insurance	5.1	8.2
	18.1	**18.4**

BANKS WEIGHTING	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Italy	0.6	--	
France	0.6	--	
Spain	0.8	--	
Japan	1.3	--	
U.K.	1.6	--	
Australia	1.7	--	
Other	2.5	3.8	Svenska Handelsbanken (Sweden), DBS (Singapore), KBC Group (Belgium)

INSURANCE WEIGHTING	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
U.K.	0.5	3.8	Prudential, Hiscox, Legal & General
France	0.4	1.8	AXA
Australia	0.3	--	
Japan	0.7	--	
Switzerland	0.8	--	
Germany	1.0	--	
Other	1.4	2.5	AIA (Hong Kong), Tryg (Denmark)

CAPITAL MARKETS WEIGHTING	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Switzerland	0.7	2.3	UBS, Partners Group
Germany	0.4	1.5	Deutsche Boerse
U.K.	0.5	1.1	St. James Place
Japan	0.2	--	
Australia	0.3	--	
Hong Kong	0.4	--	
Other	0.2	--	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the countries or industries shown above. . On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning. The views and opinions are those of the portfolio management team as of the date of this presentation, are subject to change, and may not be representative of the firm as a whole.

Materials Weights Dissected

International Equity Trust - USD

- Against a challenging macro backdrop of inflation and weakening China demand, we favour gold miners as a way to hedge against inflation.

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Metals and Mining	3.5	2.4	Barrick Gold
Chemicals	3.1	--	
Construction Materials	0.6	--	
Paper and Forest Products	0.3	--	
Containers and Packaging	0.1	--	
	7.7	**2.4**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries show n above. . On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities w ithin Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate w ere re-classified. This may impact the Portfolio's overall sector positioning.

Industrials Weights Dissected

International Equity Trust - USD

- Overweight is due to better risk/reward and our capital goods holdings are among the higher returns and more cash generative companies in the sector.

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Capital Goods	11.6	13.6	Safran, MTU Aero Engines, Legrand, Thales, Kone, Atlas Copco, Epiroc, Knorr Bremse, SMC CORP
Commercial and Professional Services	2.0	4.3	RELX, Teleperformance, Experian
Transportation	2.1	2.3	Deutsche Post
	15.7	**20.2**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries shown above. On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

Energy Weights Dissected

International Equity Trust - USD

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Diversified "Super-Majors"[1]	3.0	2.7	Shell
Other Oil, Gas and Consumable Fuels[2]	1.4	0.6	Tourmaline
Energy Equipment and Services	0.0	--	
	4.5	**3.4**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries show n above. . On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities w ithin Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate w ere re-classified.

1. Defined as Royal Dutch Shell, Total and BP w ithin EAFE.
2. Oil, Gas and Consumable Fuels ex-Super-Majors.

Consumer Discretionary Weights Dissected

International Equity Trust - USD

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Consumer Durables and Apparel	4.9	5.4	Moncler, LVMH, Adidas
Consumer Services	1.9	1.1	Aristocrat Leisure
Automobiles and Components	3.8	0.7	Minth Group
Consumer Discretionary Distribution & Retail	1.6	--	
	12.2	**7.2**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries shown above. On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

Communication Services Weights Dissected

International Equity Trust - USD

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Telecom Services	3.0	--	
Media & Entertainment	1.5	--	
	4.5	**--**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries shown above. On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

Information Technology Weights Dissected

International Equity Trust - USD

INDUSTRY SUB GROUP	MSCI EAFE Net Index (%)	PORTFOLIO (%)	HOLDINGS
Software & Services	2.3	6.3	SAP, Constellation Software
Semiconductors & Semiconductor Equipment	3.3	5.5	TSMC, Infineon Technologies, SK HYNIX INC
Technology, Hardware & Equipment	2.2	4.7	Samsung Electronics, Hexagon, Halma, Keyence
	7.9	**16.4**	

Source: MSCI and FactSet. Data as of March 31, 2023. Subject to change daily. All companies held in the portfolio for the sector are listed. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities mentioned or securities in the industries shown above. On March 17, 2023 some revisions came into effect for the Global Industry Classification Standard (GICS) Industry Group, Industry and Sub-Industry classifications and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

Sector Attribution - Q1 2023

International Equity Trust - USD

Top Five Absolute Contributors:

SAP	+70 bps
Moncler	+62 bps
Constellation Software	+58 bps
ABF	+56 bps
LVMH	+55 bps

Top Five Absolute Detractors:

BAT	-14 bps
Tourmaline Oil	-12 bps
Roche	-12 bps
Svenska Handelsbanken	-12 bps
Qiagen	-11 bps

Cumulative Returns from January 01, 2023 to March 31, 2023 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Information Technology	19.51	15.29	7.53	0.21	0.82	1.03
Industrials	11.72	20.52	15.38	0.49	0.17	0.66
Financials	2.72	19.83	19.09	0.39	0.02	0.41
Consumer Staples	7.58	18.20	10.19	0.42	-0.03	0.39
Real Estate	-2.09	--	2.55	--	0.28	0.28
Consumer Discretionary	17.21	7.11	11.86	0.58	-0.40	0.18
Materials	7.59	2.23	7.85	0.05	0.06	0.11
Energy	0.42	3.53	4.74	-0.05	0.11	0.05
Utilities	8.18	--	3.36	--	0.01	0.01
Health Care	5.37	10.01	12.99	-0.16	0.13	-0.03
Communication Services	10.45	0.13	4.47	0.04	-0.09	-0.05
Cash	--	3.15	--	--	-0.25	-0.25
Total	**8.47**	**100.00**	**100.00**	**1.98**	**0.82**	**2.80**

Source: Morgan Stanley Investment Management and FactSet.

1. Portfolio weight and MSCI EAFE Net Index are an average for the period. Attribution total return shows the impact to the portfolio's return; it is not representative of the portfolio's total return. Information shown is quoted in USD terms and include the reinvestment of all dividends and income. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
2. The 'Cash' line in the attribution includes cash balances as well as other cash instruments.
3. On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

This material has been prepared on the basis of publicly available information, internally developed data and other third-party sources believed to be reliable. Any third-party data or methodology used to derive such data is subject to change without notice. No assurance is provided regarding the reliability of such information and the Firm may not independently verify all information taken from public and third-party sources. The holdings identified do not represent all of the securities purchased, sold, or recommended for advisory clients. Each portfolio is actively managed; therefore, holdings referenced may or may not be currently represented in each portfolio.

Sector Attribution – 3 Year

International Equity Trust - USD

Top Five Absolute Contributors:

Constellation Software	+260 bps
LVMH	+219 bps
Deutsche Post	+201 bps
AXA	+166 bps
Moncler	+163 bps

Top Five Absolute Detractors:

Grifols	-109 bps
Shiseido	-62 bps
Adidas	-57 bps
Teleperformance	-56 bps
Knorr Bremse	-55 bps

Cumulative Returns from April 01, 2020 to March 31, 2023 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Information Technology	53.62	13.43	7.80	1.82	1.02	2.83
Financials	58.67	16.19	17.62	1.49	-0.03	1.46
Industrials	52.36	14.49	15.47	1.69	-0.27	1.41
Real Estate	3.72	--	2.94	--	1.32	1.32
Utilities	24.44	--	3.62	--	0.84	0.84
Consumer Discretionary	57.87	6.47	11.86	1.57	-0.85	0.73
Communication Services	18.56	2.22	4.94	-0.47	0.77	0.29
Energy	79.16	2.34	3.82	0.83	-0.91	-0.09
Materials	75.62	3.57	7.69	-0.33	-0.71	-1.04
Health Care	25.31	15.27	13.38	-3.20	-0.16	-3.36
Consumer Staples	23.00	22.75	10.87	-1.05	-2.98	-4.03
Cash	--	3.26	--	--	-1.67	-1.67
Total	**44.23**	**100.00**	**100.00**	**2.34**	**-3.64**	**-1.30**

Source: Morgan Stanley Investment Management and FactSet.

1. Portfolio weight and MSCI EAFE Net Index are an average for the period. Attribution total return shows the impact to the portfolio's return; it is not representative of the portfolio's total return. Information shown is quoted in USD terms and include the reinvestment of all dividends and income. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
2. The 'Cash' line in the attribution includes cash balances as well as other cash instruments.
3. On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

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Sector Attribution – 5 Year

International Equity Trust - USD

Top Five Absolute Contributors:

Constellation Software	+350 bps
LVMH	+241 bps
Barrick Gold	+207 bps
Deutsche Post	+172 bps
RELX	+167 bps

Top Five Absolute Detractors:

Fresenius	-268 bps
Henkel	-142 bps
Bayer	-129 bps
Kirin	-121 bps
Grifols	-109 bps

Cumulative Returns from April 01, 2018 to March 31, 2023 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Information Technology	51.12	11.14	7.02	3.33	1.65	4.98
Industrials	20.78	13.73	15.24	3.67	-0.00	3.67
Real Estate	-21.21	--	3.20	--	1.50	1.50
Financials	5.03	15.66	18.32	0.43	1.06	1.49
Consumer Discretionary	19.01	4.93	11.62	1.04	0.17	1.21
Energy	16.96	3.25	4.42	1.94	-1.11	0.83
Communication Services	-2.48	2.61	5.13	0.14	0.67	0.82
Materials	35.62	3.78	7.59	0.56	-0.27	0.30
Utilities	26.34	--	3.68	--	-0.23	-0.23
Consumer Staples	15.84	25.95	11.12	-5.22	0.63	-4.59
Health Care	43.26	15.76	12.65	-6.61	1.80	-4.81
Cash	--	3.19	--	--	-0.47	-0.47
Hedging	--	0.00	--	--	0.22	0.22
Total	**18.91**	**100.00**	**100.00**	**-0.70**	**5.62**	**4.92**

Source: Morgan Stanley Investment Management and FactSet.
1. Portfolio weight and MSCI EAFE Net Index are an average for the period. Attribution total return shows the impact to the portfolio's return; it is not representative of the portfolio's total return. Information shown is quoted in USD terms and include the reinvestment of all dividends and income. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
2. The 'Cash' line in the attribution includes cash balances as well as other cash instruments.
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Sector Attribution – 10 Year

International Equity Trust - USD

Top Five Absolute Contributors:

Unilever	+399 bps
Constellation Software	+364 bps
Keyence	+363 bps
L'Oréal	+315 bps
Novartis	+309 bps

Top Five Absolute Detractors:

Fresenius	-268 bps
Credit Suisse	-231 bps
BT	-180 bps
Santos	-157 bps
Henkel	-156 bps

Cumulative Returns from April 01, 2013 to March 31, 2023 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Information Technology	168.85	7.83	5.62	6.48	2.22	8.70
Industrials	84.63	12.20	14.48	3.32	0.07	3.40
Financials	38.32	15.64	19.91	2.47	0.89	3.36
Consumer Staples	51.75	26.84	11.14	2.67	-0.40	2.27
Real Estate	-5.31	0.50	3.39	-1.05	2.59	1.54
Communication Services	36.35	3.49	5.78	1.00	0.48	1.47
Consumer Discretionary	80.84	5.22	11.40	2.00	-1.02	0.98
Utilities	59.51	0.11	3.72	-0.22	0.20	-0.02
Materials	76.00	5.52	7.67	-0.23	-0.21	-0.45
Energy	34.27	4.26	4.99	-1.05	-2.39	-3.44
Health Care	92.33	15.39	11.88	-11.80	1.89	-9.92
Cash	--	3.01	--	--	-2.32	-2.32
Hedging	--	-0.00	--	--	0.83	0.83
Total	**62.88**	**100.00**	**100.00**	**3.57**	**2.83**	**6.40**

Source: Morgan Stanley Investment Management and FactSet.

1. Portfolio weight and MSCI EAFE Net Index are an average for the period. Attribution total return shows the impact to the portfolio's return; it is not representative of the portfolio's total return. Information shown is quoted in USD terms and include the reinvestment of all dividends and income. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
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Sector Attribution – 2022

International Equity Trust - USD

Top Five Absolute Contributors:

Thales	+76 bps
Imperial Brands	+37 bps
BAT	+36 bps
AstraZeneca	+24 bps
Safran	+23 bps

Top Five Absolute Detractors:

TSMC	-117 bps
Tencent	-96 bps
Adidas	-93 bps
Deutsche Post	-86 bps
Reckitt Benckiser	-73 bps

Cumulative Returns from January 01, 2022 to December 31, 2022 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Consumer Staples	-13.05	20.48	10.60	0.70	0.30	1.00
Financials	-4.57	18.17	17.73	0.83	0.12	0.95
Industrials	-20.58	17.13	15.27	0.61	0.07	0.68
Real Estate	-20.89	--	2.81	--	0.18	0.18
Health Care	-11.41	13.01	13.48	-0.00	0.12	0.12
Materials	-10.26	2.25	7.76	0.30	-0.22	0.08
Consumer Discretionary	-22.23	6.80	11.31	-0.41	0.42	0.02
Utilities	-12.45	--	3.44	--	-0.07	-0.07
Communication Services	-17.20	1.84	4.76	-0.40	0.16	-0.24
Information Technology	-32.37	14.46	8.24	0.34	-0.98	-0.64
Energy	27.67	2.63	4.59	-0.26	-0.92	-1.18
Cash	--	3.22	--	--	0.39	0.39
Total	**-14.45**	**100.00**	**100.00**	**1.72**	**-0.43**	**1.30**

Source: Morgan Stanley Investment Management and FactSet.

1. Portfolio weight and MSCI EAFE Net Index are an average for the period. Attribution total return shows the impact to the portfolio's return; it is not representative of the portfolio's total return. Information shown is quoted in USD terms and include the reinvestment of all dividends and income. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
2. The 'Cash' line in the attribution includes cash balances as well as other cash instruments.
3. On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

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Long-Term Sector Attribution

International Equity Trust - USD

Cumulative Returns for January 1, 1999 – March 31, 2023 [1,2,3]

Past performance is no guarantee of future results

	SECTOR PERFORMANCE	AVERAGE SECTOR WEIGHTINGS		PERFORMANCE ATTRIBUTION		
	INDEX (%)	PORTFOLIO (%)	INDEX (%)	SELECTION (%)	ALLOCATION (%)	TOTAL (%)
Consumer Staples	502.56	21.46	9.79	67.31	53.12	120.44
Information Technology	236.47	6.37	5.51	53.28	13.61	66.89
Financials	94.29	14.97	21.79	42.50	18.48	60.98
Industrials	238.35	11.50	12.74	42.88	-0.09	42.80
Communication Services	109.49	7.04	8.13	25.14	2.40	27.53
Materials	380.01	7.38	7.65	19.00	3.96	22.96
Consumer Discretionary	275.47	5.39	10.17	19.82	-4.25	15.57
Real Estate	81.34	0.89	2.74	-0.93	9.34	8.41
Utilities	245.19	2.93	4.59	-3.32	10.49	7.17
Other	--	0.00	--	--	-0.03	-0.03
Health Care	555.81	11.66	10.31	-16.24	10.38	-5.86
Energy	280.91	6.51	6.58	0.15	-10.49	-10.34
Cash	--	3.91	--	--	-22.39	-22.39
Hedging	--	-0.00	--	--	-2.10	-2.10
Total	**229.40**	**100.00**	**100.00**	**249.59**	**82.42**	**332.01**

Source: Morgan Stanley Investment Management and FactSet.

1. Portfolio weight and MSCI EAFE Net Index weights are an average for the period. Attribution total return may differ from reported total return due to differing methodologies. Returns are gross of fees, quoted in USD terms, and include the reinvestment of all dividends and income. Had fees been included, returns would be lower and results may differ. Additional contributors can include differences in pricing sources and fair valuation practices between systems used to calculate these returns. In volatile or illiquid markets and for high turnover portfolios, these differences can become increasingly significant. Attribution considers the total return of each security (price appreciation and dividend income). Management Fees and expenses are not considered by the attribution. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities in the sectors shown above.
2. The 'Cash' line in the attribution includes cash balances as well as other cash instruments.
3. On September 21, 2018, the GICS sector classifications were amended. The Telecommunication Services sector became the Communication Services sector, absorbing Media and Internet Services companies previously allocated to the Consumer Discretionary and Information Technology sectors, respectively. E-commerce companies moved from Information Technology to Consumer Discretionary. As a consequence of variants in calculations, it is likely that there will be a difference between Morgan Stanley data and that published by FactSet..

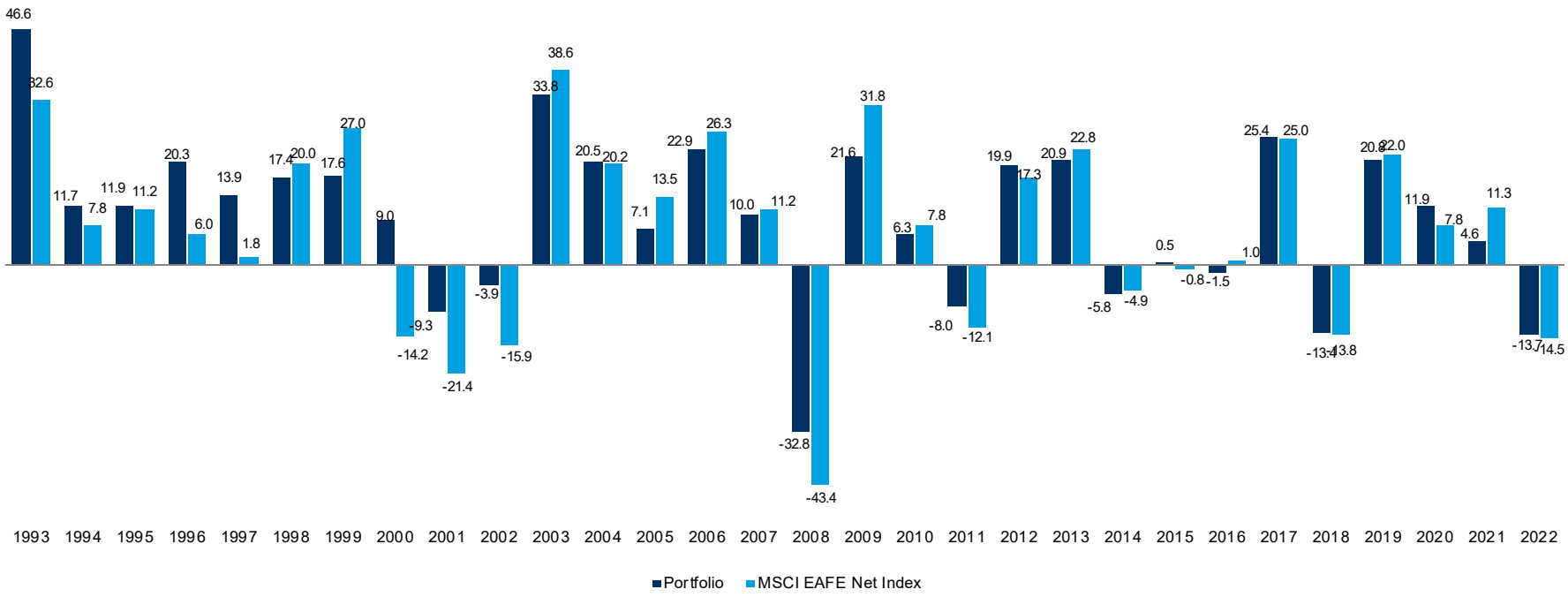
Calendar Year Performance Returns

International Equity Trust - USD

The inception date of the International Equity Trust is September 30, 1986

Past performance is no guarantee of future results

Percent %



Source: Morgan Stanley Investment Management. Performance returns reflect the average annual rates of return. Periods less than one year are not annualized. The results shown are Net of investment advisory/management fees, are quoted in USD and include the reinvestment of dividends and income. Each portfolio may differ due to specific investment restrictions and guidelines. Thus, individual results will vary. The comparison index is the MSCI EAFE Net Index with net dividends reinvested. Please refer to the standardized performance slide for additional information.

Historically Attractive Risk Return Profile

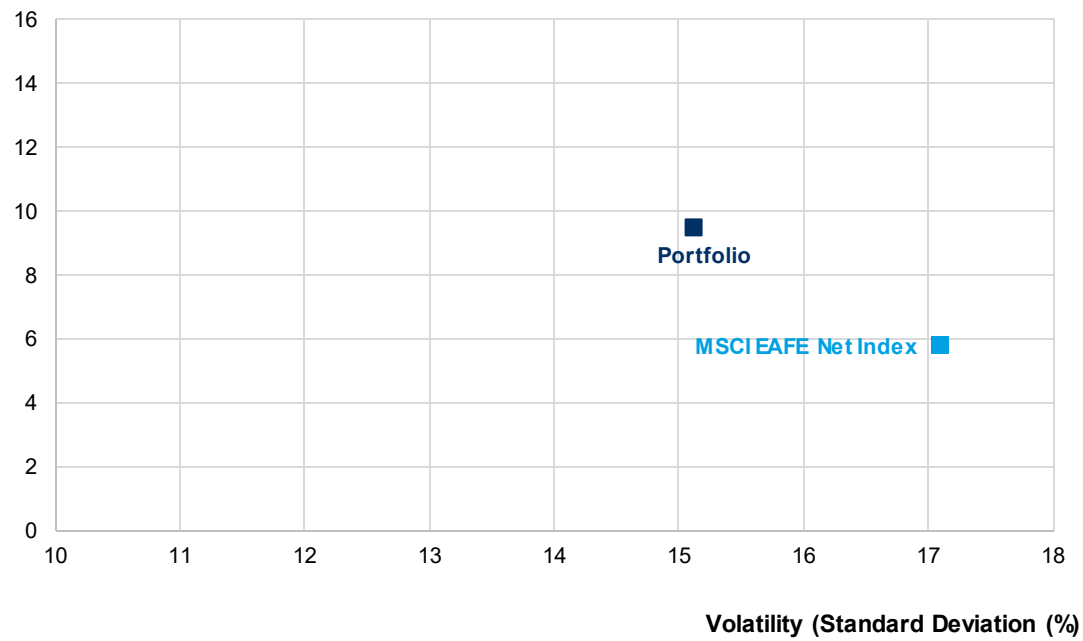
International Equity Trust - USD

Performance History:

- Attractive upside capture
- Reduced downside participation
- Lower volatility

Volatility vs. Return - Since Inception to March 31, 2023

Past performance is no guarantee of future results



Source: Morgan Stanley Investment Management. The inception date of the Portfolio is September 30, 1986. Performance returns reflect the average annual rates of return. Periods less than one year are not annualized. The results shown are Net of investment advisory/management fees, are quoted in USD and include the reinvestment of dividends and income. Each portfolio may differ due to specific investment restrictions and guidelines. Thus, individual results will vary. The comparison index is the MSCI EAFE Net Index with net dividends reinvested. Please refer to the standardized performance slide for additional information.

Risk Characteristics

International Equity Trust - USD

For Periods Ending March 31, 2023
The Inception Date of the International Equity Trust is September 30, 1986
Past performance is no guarantee of future results

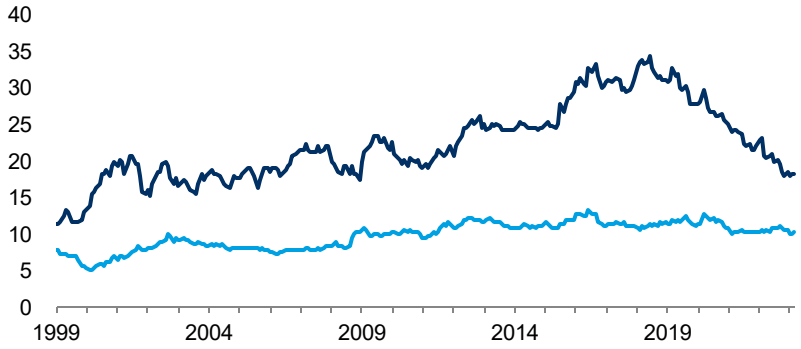
Since Inception	Portfolio (%)	MSCI EAFE Net Index (%)
Standard Deviation	15.15	17.11
Beta	0.80	--
Information Ratio	0.61	--
Sharpe Ratio	0.48	0.16
Tracking Error	7.35	--
10 Years		
Standard Deviation	14.97	14.99
Beta	0.96	--
Information Ratio	0.07	--
Sharpe Ratio	0.30	0.28
Tracking Error	4.32	--
5 Years		
Standard Deviation	17.95	17.64
Beta	0.98	--
Information Ratio	0.15	--
Sharpe Ratio	0.16	0.12
Tracking Error	4.55	--

Source: Morgan Stanley Investment Management. For the most recent month-end performance figures, please visit morganstanley.com/im or speak with your portfolio specialist. Investment returns and principal value will fluctuate and assets may be worth more or less than their original cost. Returns are net of fees and assume the reinvestment of all dividends and income. Returns for less than one year are cumulative (not annualized). Performance for other share classes will vary. Returns are compared to those of an unmanaged market index and are considered to be a relevant comparison to the portfolio. Comparisons of performance assume the reinvestment of all dividends and income. It is not possible to invest directly in an index. Please refer to the standardized performance slide for additional information.

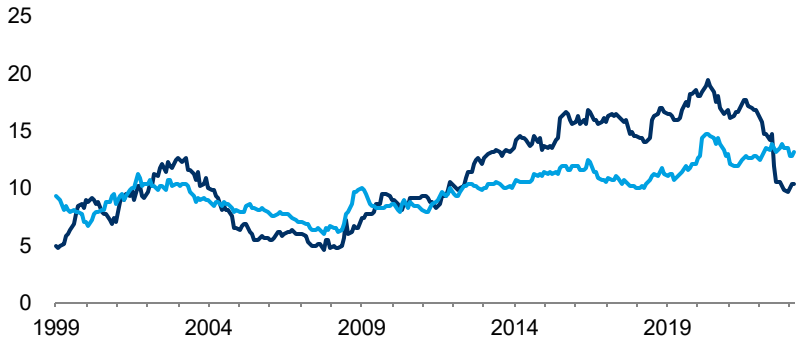
Historical Sector Weightings

International Equity Trust - USD

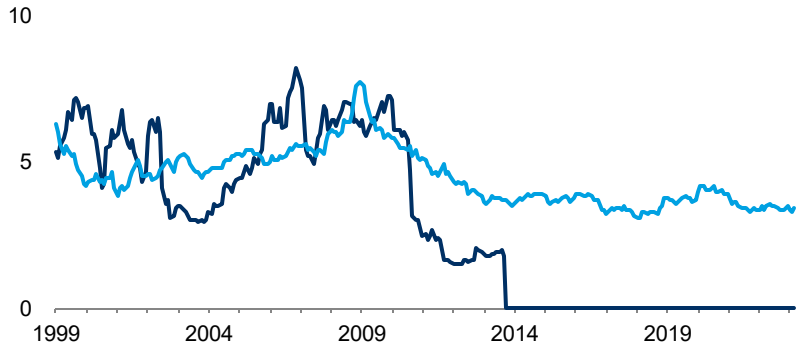
Consumer Staples (%)



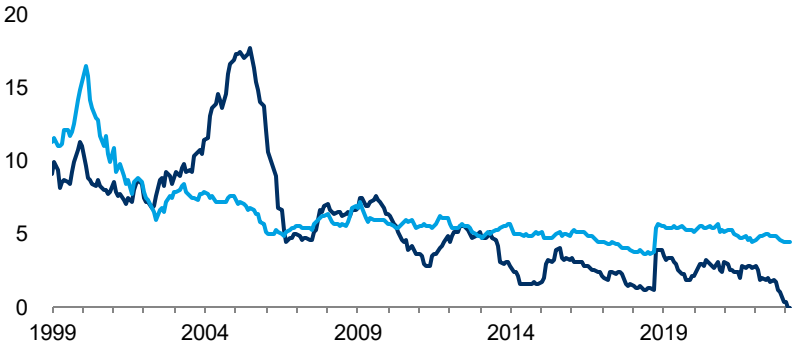
Health Care (%)



Utilities (%)



Communication Services (%)

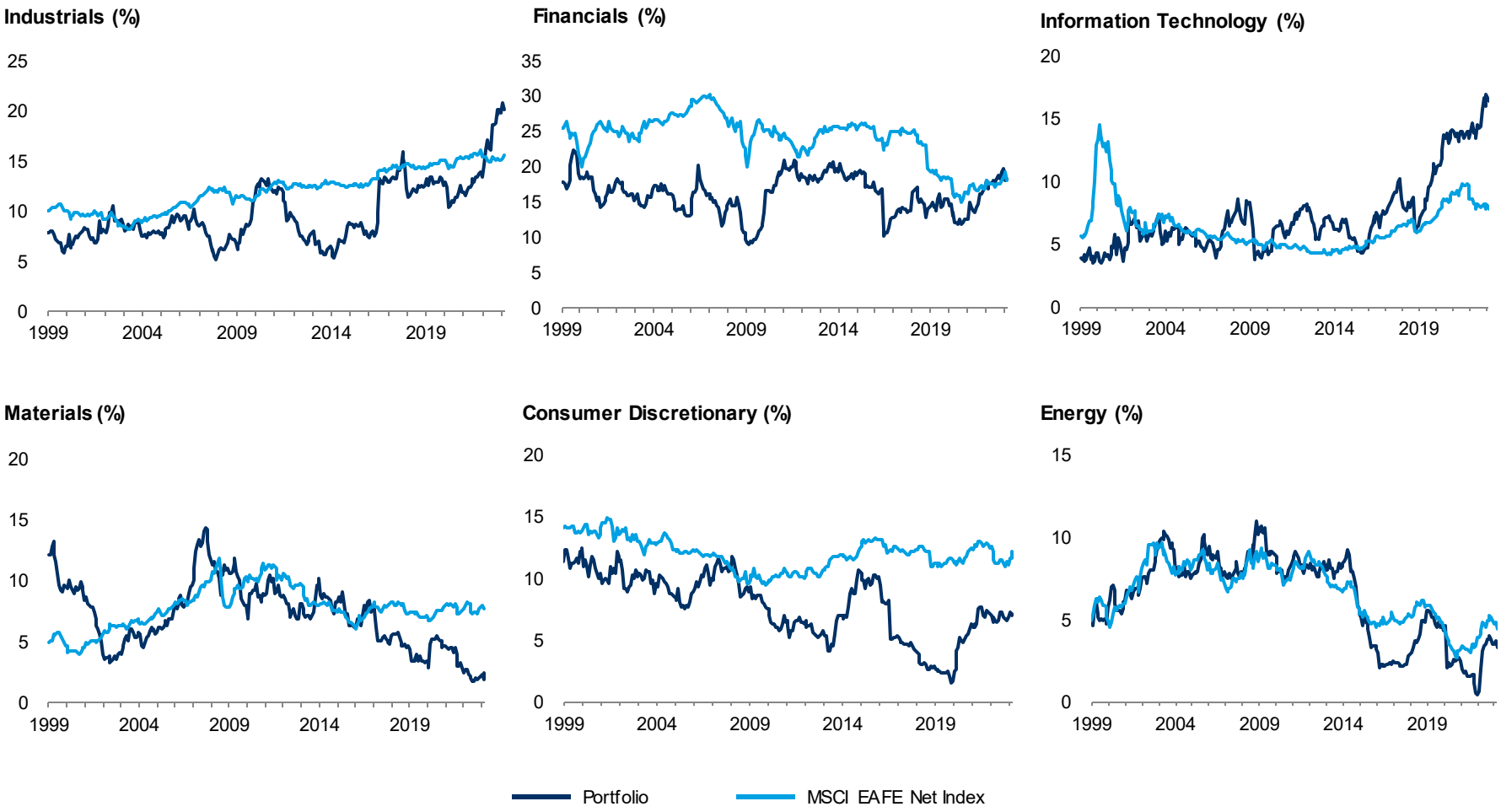


Portfolio MSCI EAFE Net Index

Source: Morgan Stanley Investment Management and MSCI. Data as March 31, 2023. Subject to change daily. Provided for informational purposes only and should not be deemed as a recommendation to purchase or sell securities in the sector referenced. On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

Historical Sector Weightings

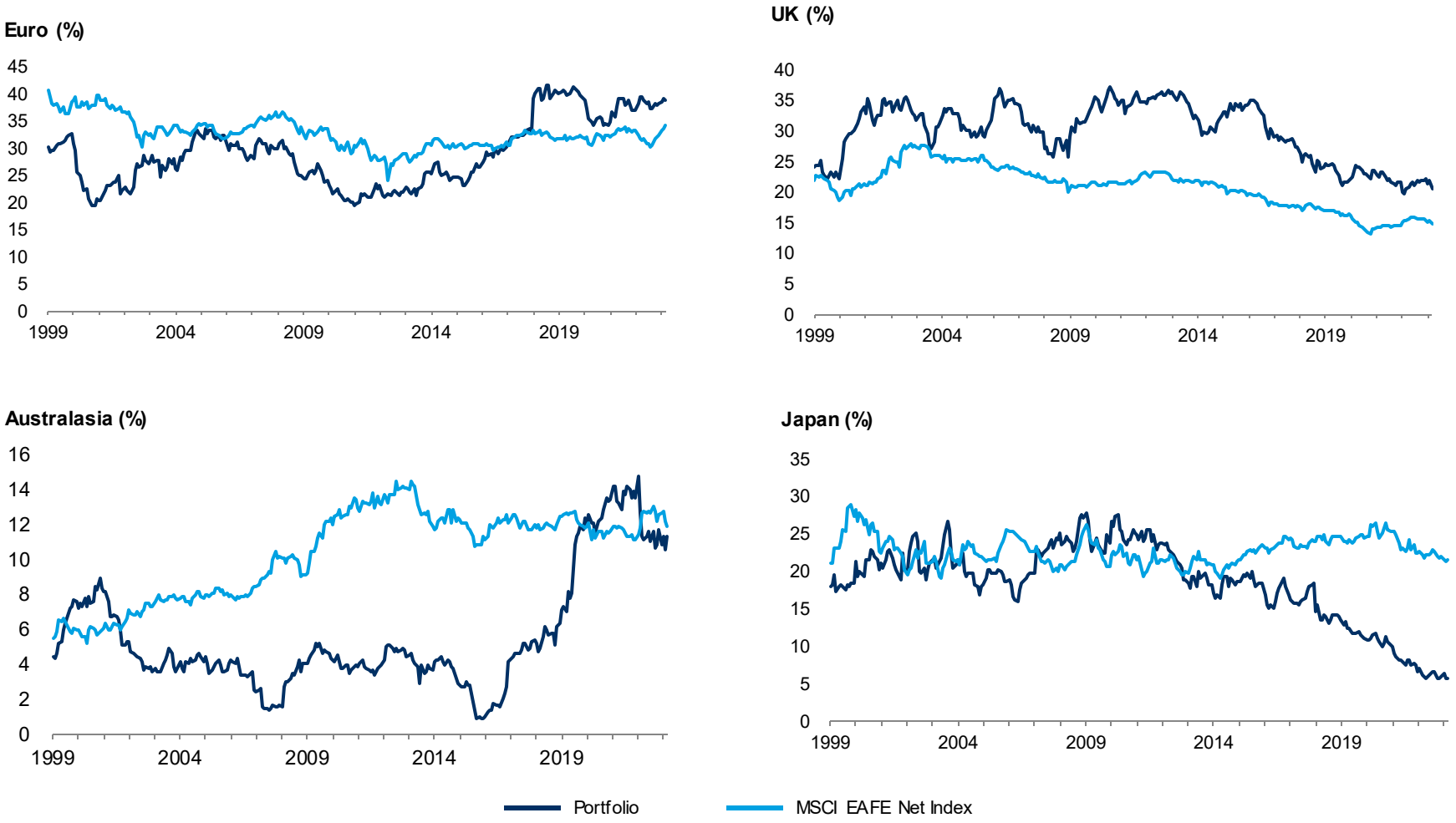
International Equity Trust - USD



Source: Morgan Stanley Investment Management and MSCI. Data as March 31, 2023. Subject to change daily. Provided for informational purposes only and should not be deemed as a recommendation to purchase or sell securities in the sector referenced. On March 17, 2023 the GICS Industry Group, Industry and Sub-Industry classifications were amended and consequently a number of securities within Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology and Real Estate were re-classified. This may impact the Portfolio's overall sector positioning.

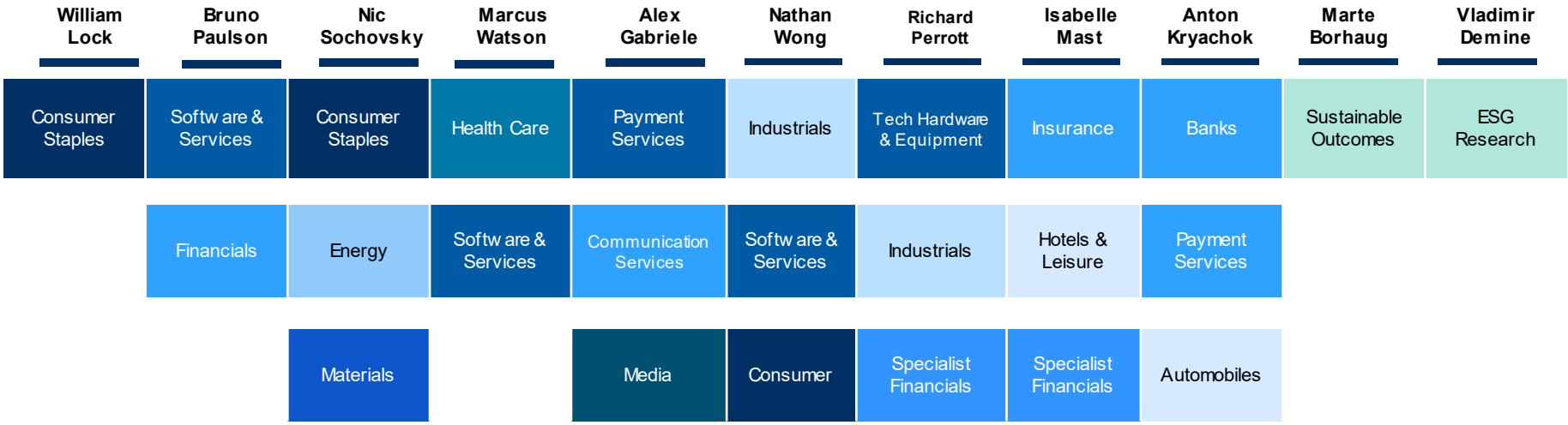
Historical Country Weightings

International Equity Trust - USD



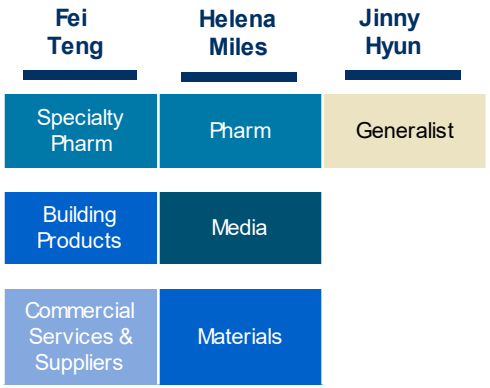
Source: Morgan Stanley Investment Management and MSCI Data as of March 31, 2023. Subject to change daily. Provided for informational purposes only and should not be deemed as a recommendation to purchase or sell securities in the region referenced.

Primary Research Responsibilities



Generalist stock pickers with sector responsibilities

High degree of cross coverage and overlapping responsibility



Internal and External Resources

MSIM Sustainability/ Global Stewardship Team

Data and Cash Management

FactSet Quality and Valuation Screens

Sell-Side Analysts

Industry Consultants

ESG Data Providers

The primary research responsibilities and team members may change from time to time, without prior notice. As of January 2023.

Portfolio Management Team

William Lock

Managing Director



william.lock@morganstanley.com

William is a portfolio manager and head of the International Equity team. He joined Morgan Stanley in 1994 and has 31 years of investment experience. Prior to joining the firm, he worked at Credit Suisse First Boston's Corporate Finance Group, and was a management consultant with Arthur D. Little. William received a B.A. in Modern History from Keble College, Oxford. William is a longstanding sponsor of the creative arts, including Glyndebourne Opera.

Bruno Paulson

Managing Director



bruno.paulson@morganstanley.com

Bruno is a portfolio manager for the International Equity team. He joined Morgan Stanley in 2009. Prior to joining the firm, Bruno worked for Sanford Bernstein in London, where he was a Senior Analyst covering the financial sector for eight years. Previously, he was a manager at the Boston Consulting Group where he focused on the financial services industry. Bruno has an M.B.A. from INSEAD where he received the Ford Prize for graduating top of class. He was also a Research Fellow in Political Economy at Nuffield College, Oxford, and received a B.A. in Politics, Philosophy and Economics with 1st Class Honours from Keble College, Oxford. Bruno was a parent-founder of The Rise School, a free school for children with high-functioning autism. He is a governor at Kensington Aldridge Academy, where he chairs the Business Committee.

Nic Sochovsky

Managing Director



nic.sochovsky@morganstanley.com

Nic is a portfolio manager for the International Equity team. He joined Morgan Stanley in 2015 and has 25 years of industry experience. Prior to joining the team, Nic worked for Credit Suisse within a top industry ranked consumer staples team covering food manufacturing, home and personal care (HPC), beverages and tobacco. Before that he headed the consumer research team at Unicredit and was a senior analyst at Merrill Lynch and Lehman Brothers covering pan-European food manufacturing and HPC. Nic received a B.A. in Economics from Sheffield University. Nic is a long time supporter of Place 2Be, the leading UK children's mental health charity.

Team members may change from time to time. As of January 2023.

Portfolio Management Team

Alex Gabriele, CFA

Managing Director



alexander.gabriele@morganstanley.com

Alex is a portfolio manager for the International Equity team. He joined Morgan Stanley from Sloane Robinson LLP in 2012 and has 14 years of buyside investment experience. Prior to joining the team, Alex was responsible for stock selection across the cyclical universe, predominantly in Asia ex-Japan. Alex is a trustee at the Belvedere Trust, a UK charity that gives grants to education, poverty alleviation and the arts. Alex holds a B.A. in Natural Sciences from Trinity College, Cambridge.

Marcus Watson

Managing Director



marcus.watson@morganstanley.com

Marcus is a portfolio manager for the International Equity team. He joined Morgan Stanley in 2008 and has 15 years of investment experience. He received a B.Sc. in Psychology from the University of Newcastle Upon Tyne.

Isabelle Mast, PhD

Executive Director



isabelle.mast@morganstanley.com

Isabelle is a portfolio manager for the International Equity team. She joined Morgan Stanley in 2021 and has 18 years of investment experience. Prior to joining the firm, she worked at Fidelity and Citadel. Isabelle is a Chartered Accountant. She read English at Pembroke College, Oxford, holds a Doctorate in English Literature from Hertford College, Oxford, a Masters in Medieval Studies from York and an M.B.A. from Queens' College, Cambridge.

Team members may change from time to time. As of January 2023.

Portfolio Management Team

Nathan Wong, CFA

Executive Director



nathan.wong@morganstanley.com

Nathan is a portfolio manager for the International Equity team. He joined Morgan Stanley in 2017 and has 23 years of investment experience. Prior to joining the team, Nathan was a Partner/Senior Analyst and developed markets equities generalist at Sloane Robinson. Before that he worked in equity research in Merrill Lynch's Specialty Finance team and before that he qualified as a chartered accountant with Deloitte. He holds a B.Sc. in Mathematics with 1st Class Honours from Imperial College, receiving the Institute of Mathematics and its Applications prize in his final year.

Richard Perrott, CFA

Executive Director



richard.perrott@morganstanley.com

Richard is a portfolio manager for the International Equity team. He joined Morgan Stanley in 2015 and has 17 years of investment experience. Prior to joining the team, Richard was an equity research analyst at Autonomous Research covering specialty financials. Before that Richard covered financials at Berenberg Bank and financials and healthcare at Sanford Bernstein. Richard received an M.A. in Mathematics and Philosophy from St Edmund Hall, Oxford. Richard is a trustee of Shrewsbury House Community Association.

Anton Kryachok, CFA

Executive Director



anton.kryachok@morganstanley.com

Anton is a portfolio manager for the International Equity team. He joined Morgan Stanley in 2021 and has 13 years of investment experience. Prior to joining the team, Anton was a Research Analyst at Sculptor Capital (formerly OchZiff) and prior to that he was an Equity Analyst covering European banks at UBS. He holds a B.Sc. in Economics from the London School of Economics and Political Science.

Team members may change from time to time. As of January 2023.

Portfolio Management Team

Marte Borhaug

Executive Director



marte.borhaug@morganstanley.com

Marte is a portfolio manager and Head of Sustainable Outcomes for the International Equity team. She joined Morgan Stanley in 2021 and has 13 years of experience in sustainability, six of those in financial services. She was previously the Global Head of Sustainable Outcomes at Aviva Investors. She joined Aviva from the Confederation of British Industry (CBI) where she was Head of Financial Services and Corporate Governance. Before this she led sustainable finance campaigns in Brussels at the EU public affairs consultancy, The Brussels Office and the Mission of Norway to the EU. Marte is co-chair of the 30% Club Investor Group, an advisor to Rosa UK, a charity that funds grassroots women's organisations to help to make the UK a fairer, safer place for women and a mentor at the social accelerator Bethnal Green Ventures. She holds an M.Sc. in European Political Economy from the London School of Economics.

Vladimir Demine, CFA

Executive Director



vladimir.demine@morganstanley.com

Vladimir is a portfolio manager and Head of ESG Research for the International Equity team. He joined Morgan Stanley in 2009 and has 21 years of investment experience. Prior to joining the firm, Vladimir worked for UBS Global Asset Management in London, where he was an analyst responsible for stock selection of consumer staples holdings in key client mandates. Vladimir received an M.Sc. in Investment Management with Distinction from City University (CASS) Business School and a Master's in Finance with Distinction from St Petersburg State University of Economics and Finance.

Team members may change from time to time. As of January 2023.

Portfolio Management Team

Helena Miles

Vice President



helena.miles@morganstanley.com

Helena is a research analyst for the International Equity team. She joined Morgan Stanley in 2019 and has 10 years of investment experience, most recently covering Luxury Goods & Retail at Capital World Investors. Previously, Helena covered European Business Services at Bank of America Merrill Lynch. Helena holds an M.A. in History with First-Class Honours from Trinity Hall, Cambridge. She was elected a Bateman Scholar and awarded the C W Crawley prize for Academic Excellence.

Fei Teng

Vice President



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Fei is a research analyst for the International Equity team. He joined Morgan Stanley in 2019 and has 10 years of investment experience. Prior to joining the team, Fei was an analyst at Berenberg, and prior to that at Credit Suisse. He holds a M.Eng. in Chemical Engineering from Downing College, Cambridge.

Jinny Hyun

Analyst



jinny.hyun@morganstanley.com

Jinny is a research analyst for the International Equity team. She joined Morgan Stanley in 2021. Jinny holds a First-Class Honours degree in Business Administration from the University of Hong Kong.

Team members may change from time to time. As of January 2023.

Cash Management & Data Analytics

Rob Butler, CFA

Vice President



rob.butler@morganstanley.com

Rob manages portfolio cash and performs data analytics for the International Equity team. He joined Morgan Stanley in 2016 and has 12 years of industry experience. Prior to joining the team, Rob was a Portfolio and Quantitative Analytics Specialist at FactSet. Rob received an B.A. in Economics from the University of Exeter, and M.Sc in Applied Statistics and Computational Data Analytics from Birkbeck College, University of London.

Team members may change from time to time. As of January 2023.

Portfolio Specialist Team

Laura Bottega

Managing Director



laura.bottega@morganstanley.com

Laura is the COO and Head of Client Experience for the International Equity team. She is also a member of the Investment Management Operating Committee. She joined Morgan Stanley in 2006 and has 25 years of investment experience. Between 2006 and 2009, Laura was CAO of the London Active Equity Group of MSIM. Prior to joining the firm, Laura was Executive Director at Goldman Sachs Asset Management in active equity product management. Prior to this, Laura worked at Salomon Smith Barney as an equity research analyst for the European strategy and luxury goods teams. Laura holds a B.A. (Hons.) in political studies from the University of Cape Town. Laura was named Investment Manager of the Year in Professional Pensions' Women in Pensions 2018 awards. She led MSIM EMEA's diversity efforts in 2019 and captains Morgan Stanley's Step In, Step Up team in West London schools motivating girls to consider careers in financial services.

Jill Ytuarte

Managing Director



jill.ytuarte@morganstanley.com

Jill is the lead portfolio specialist for the International Equity team. She joined Morgan Stanley in 2004 and has 25 years of investment industry experience. Prior to joining the firm, Jill served as a management consultant at Kasina and before that was an assistant vice president of Institutional Marketing at AllianceBernstein. Jill received a B.A., magna cum laude, from Adelphi University Honors College, studied English Literature at St. Anne's College, Oxford, and earned an M.B.A. from Columbia Business School.

Team members may change from time to time. As of January 2023.

Portfolio Specialist Team

David Bernard

Executive Director



david.bernard@morganstanley.com

David is a portfolio specialist for the International Equity team. He joined Morgan Stanley in 2008 and has 15 years of industry experience. Prior to joining the team, David was a member of the Global Emerging Markets Equity team and previously worked on the Intermediary Sales team where he was responsible for leading sales efforts on the East Coast focusing on Registered Investment Advisors and Bank Trusts. David received a B.A. (with honors) in Political Science from Furman University.

Monica Carta

Executive Director



monica.carta@morganstanley.com

Monica is a portfolio specialist for the International Equity team. She joined Morgan Stanley in 2002 and has 21 years of industry experience. Prior to joining Investment Management, she worked in the Fixed Income Division for the Securitized Product Group. Before joining Morgan Stanley, Monica worked at PriceWaterhouse Coopers in their business process outsourcing product development team.

Alistair Corden-Lloyd

Executive Director



alistair.corden -lloyd@morganstanley.com

Alistair is a senior portfolio specialist for the International Equity team. He joined Morgan Stanley in 1997 and was an investor on the International Small Cap strategy for 12 years. Prior to joining the firm, Alistair worked in the luxury goods industry for five years. He received a B.Sc. in Geography from Kingston University, an M.B.A. from the Graduate School of Business, University of Cape Town and an M.Sc. in Computer Science from Kent University.

Team members may change from time to time. As of January 2023.

Portfolio Specialist Team

Candida de Silva

Executive Director



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Candida is a senior portfolio specialist for the International Equity team. She joined Morgan Stanley in 2019 and has 23 years of investment industry experience. Candida spent 11 years at BlackRock, most recently as Head of the UK Charities & Endowments business, having previously served as Head of EMEA Retail Marketing. Prior to BlackRock, Candida was an Executive Director at Goldman Sachs Asset Management following four years at Mellon and its subsidiary Newton Investment Management, covering international marketing for their institutional and intermediary businesses. Candida holds an M.A. in Modern Languages from Fitzwilliam College, Cambridge, and a Postgraduate Diploma in Marketing from the Chartered Institute of Marketing. She was highly commended in the category of Fund Saleswoman of the Year in the Investment Week Women in Investment Awards 2021 and sits on the EMEA steering committee of the MS Women's Business Alliance.

Colleen Dyer

Executive Director



colleen .dyer@morganstanley.com

Colleen is a portfolio specialist for the International Equity team. She joined Morgan Stanley Investment Management in 2007 and has 22 years of industry experience. Prior to joining the firm, Colleen worked on the Consultant Relations team at Capital Guardian Trust Company. Prior to that, she worked on the Consultant Relations team at State Street Global Advisors. Colleen received a B.A. in International Relations from Boston University.

Munenori Yoshimi, CFA

Executive Director



munenori.yoshimi@morganstanley.com

Munenori is a portfolio specialist for the International Equity team. He joined Morgan Stanley in 1999 and has 29 years of investment experience. Prior to joining the firm, he worked at Daiwa International Capital Management where he was a portfolio manager for global equity portfolios, and previously as a manager of Japanese and Asian equities. Prior to that, he worked at Solomon Brothers (Asia) where he was responsible for trading and sales of Japanese equity derivative products. He also worked as a compliance officer at Solomon Brothers (Asia). Munenori received a B.A. in Law from University of Tokyo. He is a Chartered Member of the Security Analysts Association of Japan and a member of the CFA Institute.

Team members may change from time to time. As of January 2023.

Portfolio Specialist Team

Anna Baron

Vice President



anna.baron@morganstanley.com

Anna is a portfolio specialist for the International Equity team. She joined Morgan Stanley in 2001 and has 33 years of industry experience. Prior to joining the firm, Anna worked in Marketing at the London Stock Exchange for 11 years. Anna received a professional post graduate diploma in Marketing from the Chartered Institute of Marketing and holds the IMC qualification.

Julia Forde

Vice President



julia.forde@morganstanley.com

Julia is a portfolio specialist for the International Equity team. She joined Morgan Stanley Investment Management in 1992 and has 35 years of industry experience. Prior to joining Morgan Stanley, Julia worked at Chase Manhattan Bank for their InfoServ and Investment Banking groups.

Teppei Adachi

Senior Associate



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Teppei is a portfolio specialist for Global Equity portfolios and a member of the International Equity team. He joined Morgan Stanley Investment Management in 2020 and has 12 years of industry experience. Prior to joining the firm, Teppei worked at Nomura Securities, in the Equity Derivatives, Execution Sales Trading, and the Prime Brokerage businesses. Teppei has a B.A. in Political Science from Waseda University.

Team members may change from time to time. As of January 2023.

Risk Considerations

There is no assurance that a portfolio will achieve its investment objective. Portfolios are subject to market risk, which is the possibility that the market values of securities owned by the portfolio will decline and that the value of portfolio shares may therefore be less than what you paid for them. Market values can change daily due to economic and other events (e.g. natural disasters, health crises, terrorism, conflicts and social unrest) that affect markets, countries, companies or governments. It is difficult to predict the timing, duration, and potential adverse effects (e.g. portfolio liquidity) of events. Accordingly, you can lose money investing in this portfolio. Please be aware that this portfolio may be subject to certain additional risks. In general, **equity securities'** values also fluctuate in response to activities specific to a company. Stocks of **small- and medium-capitalization companies** entail special risks, such as limited product lines, markets and financial resources, and greater market volatility than securities of larger, more established companies. Investments in **foreign markets** entail special risks such as currency, political, economic, and market risks. The risks of investing in **emerging market** countries are greater than the risks generally associated with investments in foreign developed countries. **Derivative instruments** may disproportionately increase losses and have a significant impact on performance. They also may be subject to counterparty, liquidity, valuation, correlation and market risks.

ESG strategies that incorporate impact investing and/or Environmental, Social and Governance (ESG) factors could result in relative investment performance deviating from other strategies or broad market benchmarks, depending on whether such sectors or investments are in or out of favor in the market. As a result, there is no assurance ESG strategies could result in more favorable investment performance.

Risks of International Investing. Any investment in foreign equity securities may involve a greater degree of risk than an investment in domestic equity securities. Among other things, foreign securities investments may carry the risks of less publicly available information, more volatile markets, less strict securities regulation, less favorable tax provisions, and a greater likelihood of war and expropriation of personal property than investments in domestic securities.

Liquidity. A withdrawing subscriber may, at the discretion of MSIM, receive securities owned by the Trust in lieu of cash. The risk of loss and delay in liquidating these securities will be borne by the subscriber, with the result that such subscriber may receive less cash than it would have received on the date of withdrawal.

ERISA Issues. MSIM anticipates that most or all of the subscribers will be entities subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and their participation will require special consideration of certain factors that are described in more detail in the Memorandum.

Federal Income Taxation. The Trust has received a determination letter from the Internal Revenue Service as to the tax-exempt status of the Trust. MSIM, and the Trustee intend to comply with the provisions of ERISA and the Internal Revenue Code at all times. However, if for any reason the Trust should lose its tax-exempt status as a group trust, it would terminate pursuant to the terms of the Agreement of Trust.

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market. In addition, there are important differences in how a strategy is carried out in each of the investment vehicles.

Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. A separately managed account may not be appropriate for all investors. Please consider the investment objectives, risks and fees of the strategy carefully before investing. A minimum asset level is required. For important information about the investment manager, please refer to Form ADV Part 2.

Morgan Stanley Investment Management is the asset management division of Morgan Stanley. Morgan Stanley is a full-service securities firm engaged in a wide range of financial services including, for example, securities trading and brokerage activities, investment banking, research and analysis, financing and financial advisory services.

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Important Information

Morgan Stanley Investment Management International Equity Trust (the "Trust") is a privately offered unregistered fund whose units are offered for investment only to qualified employee benefit plans and certain governmental plans pursuant to a confidential offering memorandum. The Trust is not currently registered, and does not propose in the future to be, registered as an investment company under the U.S. Investment Company Act of 1940, as amended. Morgan Stanley Investment Management Inc. is the sponsor of the Trust and Morgan Stanley Investment Management Limited is the investment manager of the Trust; both of which are registered with the U.S. Securities and Exchange Commission as investment advisers under the U.S. Investment Advisers Act of 1940, as amended.

This communication has been prepared solely for informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy.

Past performance is not a guarantee of future results. Returns may increase or decrease as a result of currency fluctuations. The value of the investments and the income from them can go down as well as up and an investor may not get back the amount invested.

A separately managed account may not be appropriate for all investors. Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing. A minimum asset level is required. For important information about the investment manager, please refer to Form ADV Part 2.

Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

The indices do not include any expenses, fees or sales charges, which would lower performance. The indexes are unmanaged and should not be considered an investment. It is not possible to invest directly in an index.

Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. There can be no assurance that actual market returns will mirror the team's expected market returns shown. Actual results may significantly differ. Additionally, no representation is being made that any account, will or is likely to achieve results similar to those shown.

All investments involve risks, including the possible loss of principal. The material contained herein has not been based on a consideration of any individual client circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication'.

Except as otherwise indicated herein, the views and opinions expressed are those of the portfolio management team, and are based on matters as they exist as of the date of preparation and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date hereof. These do not reflect the opinions of all Investment teams at MSIM or the views of the firm as a whole, and may not be reflected in the strategies and products that the Firm offers.

Charts and graphs provided herein are for illustrative purposes only. This material has been prepared using sources of information generally believed to be reliable but no representation can be made as to its accuracy.

The information presented does not constitute, and should not be construed as, investment advice or recommendations with respect to the investments mentioned. Moreover, neither the information nor any opinion expressed constitutes a solicitation for the purchase or sale of any investment.

All reasonable steps have been taken to ensure that, as at the date of preparation, the information contained herein is true and accurate in all material respects. No representation or warranty is made as to the accuracy or completeness or otherwise of this document, or the reasonableness of any assumptions on which this document may be based.

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Glossary

Capital expenditure, or **Capex,** are funds used by a company to acquire, upgrade, and maintain physical assets such as property, industrial buildings, or equipment. Capex is often used to undertake new projects or investments by the firm. This type of financial outlay is also made by companies to maintain or increase the scope of their operations.

Compound Annual Growth Rate (CAGR) is the year-over-year growth rate of an investment over a specified period.

Dividend Yield is the ratio between how much a company pays out in dividends each year relative to its share price.

Downside is the negative movement in the price of a security, sector or market. Downside can also refer to economic conditions and it describes periods when an economy has either stopped growing or is shrinking.

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) is essentially net income with interest, taxes, depreciation, and amortization added back to it, and can be used to analyze and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions.

Free cash flow (FCF) is operating cash flows (net income plus amortization and depreciation) minus capital expenditures and dividends.

Gross Domestic Product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period. It includes all private and public consumption, government outlays, investments and net exports.

Gross Margin represents the percent of total sales revenue that the company retains after incurring the direct costs associated with producing the goods and services sold by a company.

NTM = Next Twelve Months.

Net debt is a measure of a company's ability to repay all debt if it were called immediately. It is calculated by adding short-term and long-term debt and subtracting all cash and cash equivalents.

Price-Earnings (P/E) is the price of a stock divided by its earnings per share for the past 12 months. Sometimes called the multiple, P/E gives investors an idea of how much they are paying for a company's earning power. The higher the P/E, the more investors are paying, and therefore the more earnings growth they are expecting.

Return On Operating Capital Employed (ROOCE) is a ratio indicating the efficiency and profitability of a company's trade working capital. Calculated as: earnings before interest and taxes/property, plant and equipment plus trade working capital (ex-financials and excluding goodwill).

Turnover is based on the fund's current prospectus.

Upside is the forecasted dollar amount or percentage increase in the price of an investment. A higher upside means that the stock has more value than is currently reflected in the stock price.

Indices

The **MSCI All Country World Index (ACWI)** is a free float-adjusted market capitalization weighted index designed to measure the equity market performance of developed and emerging markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

The **MSCI EAFE Index (Europe, Australasia, Far East)** is a free float-adjusted market capitalization index that is designed to measure the international equity market performance of developed markets, excluding the US & Canada. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The MSCI EAFE Index currently consists of 21 developed market country indices. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

The **MSCI World Index** is a free float adjusted market capitalization weighted index that is designed to measure the global equity market performance of developed markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

The **MSCI World Consumer Staples Index** is designed to capture the large and mid-cap segments across 23 Developed Markets (DM) countries around the world. All securities in the indices are classified in the Consumer Staples sectors, respectively, as per the Global Industry Classification Standard (GICS®).

The **MSCI World Quality Index** is based on MSCI World, its parent index, which includes large and mid cap stocks across 23 Developed Market (DM) countries*. The index aims to capture the performance of quality growth stocks by identifying stocks with high quality scores based on three main fundamental variables: high return on equity (ROE), stable year-over-year earnings growth and low financial leverage. The MSCI Quality Indexes complement existing MSCI Factor Indexes and can provide an effective diversification role in a portfolio of factor strategies.

The **FTSE All-Share Index** is a capitalisation-weighted index, comprising around 600 of more than 2,000 companies traded on the London Stock Exchange (LSE). The index is maintained by FTSE Russell, a subsidiary of the London Stock Exchange Group. It aims to represent at least 98% of the full capital value of all UK companies that qualify as eligible for inclusion

The **S&P 500® Index** measures the performance of the large cap segment of the U.S. equities market, covering approximately 75% of the U.S. equities market. The Index includes 500 leading companies in leading industries of the U.S. economy.

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Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
Report From Money Manager - Causeway

Attachments

Report From Money Manager - Causeway

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:37 PM
Final Approval Date: 05/10/2023



City of Fort Pierce Retirement and Benefit System

Causeway Emerging Markets Equity Fund

Fund Review - 1Q 2023

May 18, 2023

Los Angeles, CA

Dallas, TX Bryn Mawr, PA Melbourne, Australia Shanghai, China (Subsidiary)

www.causewaycap.com

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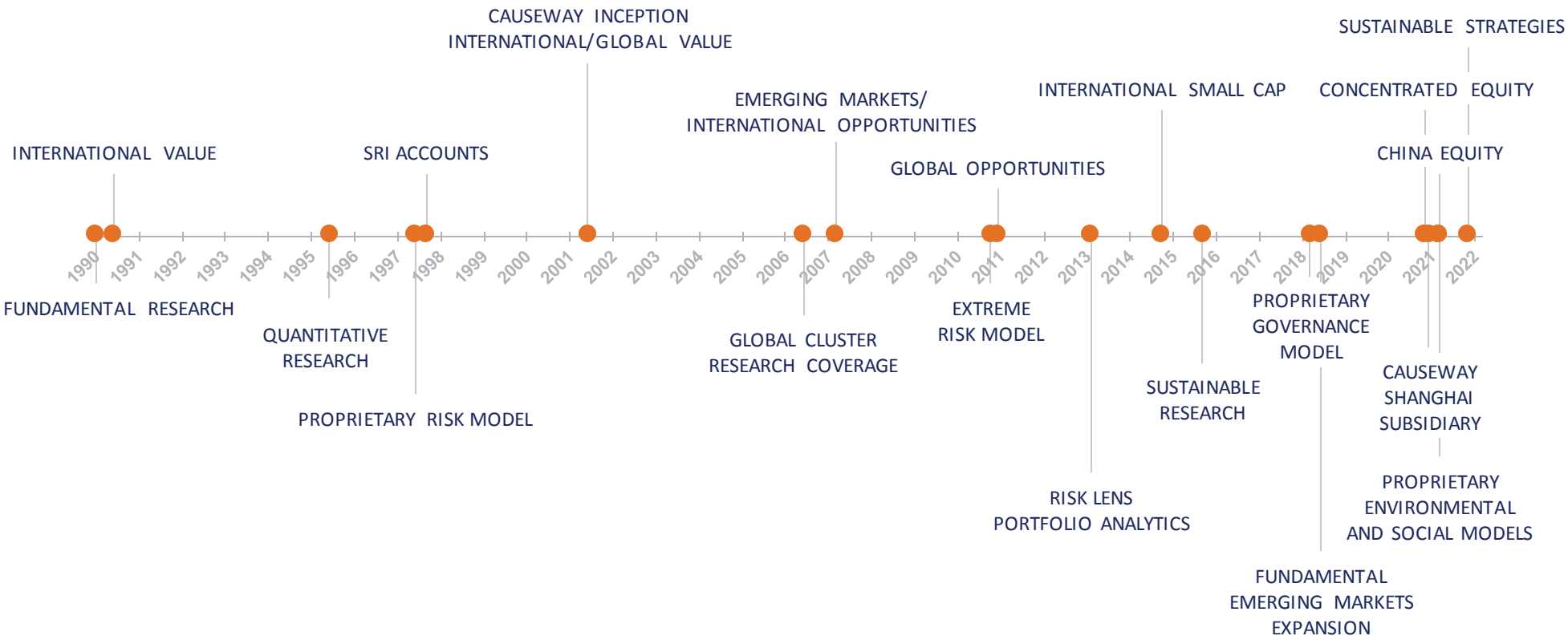
Committed to Clients



Our Firm	For Clients
Manages global equities and exposures exclusively	Focuses resources
Wholly owned by current and former employees, broadly distributed across investment team	Aligns interests with clients and promotes organizational stability
Has an experienced investment team	Results in collaborative, informed decision making
Integrates fundamental and quantitative research	Goal is to deliver superior risk-adjusted returns over full market cycles

Investment Solutions for Clients

> Using our core competencies, we develop investment capabilities to address client needs



Dates prior to 2001 represent activities by certain members of the investment team at their prior firm.

Diversity: An Integral Part of Causeway's Culture

Ownership	Employees*	Investment Professionals*	Board of Managers**
• Majority-owned by women and minorities (combined) • 14% of owners are women • 37% of owners are minorities	• 36% are women • 43% are minorities • 58% are women and minorities (combined)	• 21% are women • 51% are minorities	• 3 of 5 are women

L.A. WORKS

Established in 1991
Causeway employees have volunteered since 2004

Cornell
SC Johnson College of Business
Parker Center for Investment Research

MBA WOMEN IN INVESTING (WIN) CONFERENCE

Established in 2010
Causeway has sponsored since 2012

WIN
WOMEN IN INSTITUTIONAL INVESTMENTS NETWORK

Established in 2014
Causeway has partnered with WIIIN since 2015

girls who invest

Established in 2015
Causeway has sponsored 7 interns since 2016

SEO Seizing Every Opportunity

Established in 1980
Causeway has sponsored 4 interns since 2020

UCLA Anderson Riordan Programs

Established in 1987
Causeway has partnered since 2020

First Generation Investors

Established in 2018
Causeway has partnered since 2021

Junior Achievement of Southern California

Established in 1919
Causeway has partnered since 2021

*Includes employees of both Causeway Capital Management LLC and its affiliate, Causeway (Shanghai) Information Consulting Co., Ltd.
**Includes one non-voting director who attends meetings.

Percentages as of March 31, 2023.

Business Update - as of March 2023

Assets under management are approximately $43 billion

Fundamental + Quantitative Convergence Strategies Include:

- International Value Equity - $32bn
  - *International Value - $21.8bn*
  - *Select- $6.2bn*
  - *ADR- $4.0bn*
- Global Value Equity – $3.1bn
  - *Global Value – $3.1bn*
  - *Concentrated - $5.0mn*
  - *ADR - $151mn*
- Emerging Markets Equity - $3.5bn
- International Opportunities - $3.3bn
- International Small Cap - $529mn
  - *International Developed Small Cap – $56mn*
- China Equity - $3.8mn
- Global Sustainable - $5.3mn
  - *Global Sustainable Leaders – $2.5mn*
  - *Global Sustainable Equity - $2.8mn*

Total staff is 106 employees, including 28 fundamental and 10 quantitative research professionals*
Causeway is 100% owned by current and former employees, currently 29 members

**Includes employees of both Causeway Capital Management LLC and its affiliate, Causeway (Shanghai) Information Consulting Co., Ltd.*

Serving Clients Worldwide

(Clients for more than 10 years noted in blue)

SUB-ADVISED

American Beacon Funds: American Beacon Intl Equity Fund
Christian Brothers Investment Services, Inc.:
Catholic Responsible Investments Intl Equity Fund
Columbia Funds Series Trust I: Multi-Manager Intl Equity
Morgan Stanley Pathway Funds
Harbor Capital Group Trust of Defined Benefit Plans
Jackson National Asset Mgmt/CCM Intl Value Select Fund
JNL Multi-Manager International Small Cap Fund
Northern Trust Active M International Equity Fund
Principal/Causeway International Value CIT
Principal Funds, Inc.: Overseas Fund
Prudential Retirement Insurance and Annuity Company
SEI Investments Canada Company: International Equity Fund
SEI Institutional Investments Trust: International Equity Fund
SEI Institutional Investments Trust: EM Equity Fund
14 Confidential Sub-Advised

CORPORATE

Ameren Master Retirement Trust
American Airlines, Inc., Master Fixed Benefit Pension Plan
Covenant Health, Inc.
Danaher Corporation Retirement Plans' Master Trust
Jack In The Box Inc. Retirement Plan
Rockwell Automation
Simpson Thacher & Bartlett LLP
United Corporations Limited
Unisys Master Trust
US Steel and Carnegie Pension Fund: Retirement Plan Trust
15 Confidential Corporate

CIT

Causeway Emerging Markets Equity CIT
Causeway International Value Equity CIT

PUBLIC (GOVERNMENT)

City of Philadelphia Public Employees Retirement System
City of Tucson Supplemental Retirement System
Fire & Police Employees' Retirement System City of Baltimore
Insurance Commission of Western Australia
LA County Deferred Compensation and Thrift Plan
New York State Common Retirement Fund
Ohio Police & Fire Pension Fund
Public School Retirement System of The City of St. Louis
Trust for Retiree Medical, Dental and Life Insurance Plan of the Army and Air and Air Force Exchange Service
Retirement Annuity Plan for Employees of the Army & Air Force Exchange Svc.
State Board of Administration of Florida
Teachers Retirement System of Oklahoma
The Winnipeg Civic Employees' Pension Plan
Winnipeg Police Pension Plan
11 Confidential Public (Government)

UNION/MULTI-EMPLOYER

1199 Health Care Employees Pension Fund
Amalgamated Bank
Elevator Constructors Union Local No. 1 Annuity and 401(k) Plan
Healthcare Employees' Pension Plan - Manitoba
4 Confidential Union/Multi-Employer

FOUNDATION/ENDOWMENT/CHARITABLE

John S. and James L. Knight Foundation
The Healthcare Foundation of New Jersey
The Pittsburgh Foundation
W. Clement & Jessie V. Stone Foundation
Western Pennsylvania Conservancy
10 Confidential Foundation

UCITS

Causeway Emerging Markets UCITS Fund
Causeway Global Value UCITS Fund

SOVEREIGN WEALTH FUND

1 Confidential Sovereign Wealth Fund

MODEL/SMA PROGRAMS

CIBC Asset Management Inc.
Fidelity Instl Wealth Adviser LLC
FolioDx
Fortigent, LLC
Fulton Bank, N. A.
Merrill Lynch Investment Advisory Program
Natixis Advisors, L.P./Callan LLC
Raymond James & Associates, Inc.
Sawtooth Solutions, LLC
SEI: SMAP/IMAP Managed Acct Program
SMArtX Advisory Solutions, LLC
Strategic Advisers LLC
SYSTM Wealth Solutions LLC
Vestmark Advisory Solutions, Inc
15 Confidential Model/SMA Programs

SUPERANNUATION

1 Confidential Superannuation

HEALTH CARE

Mercy Health, Inc.
Mercy Health Retirement Trust

HIGH NET WORTH

14 Confidential High Net Worth

DEFINED CONTRIBUTION

1 Confidential Defined Contribution

MUTUAL FUND

Causeway Concentrated Equity Fund
Causeway Emerging Markets Fund
Causeway Global Value Fund
Causeway International Opportunities Fund
Causeway International Small Cap Fund

All separate account clients as well as all Causeway group trust and private fund investors included. It is not known whether the listed clients and investors approve or disapprove of Causeway or its investment advisory services. Clients may have multiple accounts, which are separately represented above.

Our Firm

OPERATING COMMITTEE

Sarah Ketterer | Harry Hartford | Gracie Fermelia | Conor Muldoon | Joe Gubler | Eric Crabtree | Paul O'Grady

PORTFOLIO MANAGEMENT

Sarah Ketterer
Chief Executive Officer

Harry Hartford
President

Jonathan Eng

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Conor Muldoon, CFA

Duff Kuhnert, CFA

Alessandro Valentini, CFA

Joe Gubler, CFA

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Ryan Myers

Steven Nguyen, CFA

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Mozaffar Khan, PhD
Director of Sustainability Research

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Andrew Liu, CFA

Andrew Zhang, CFA

Ross Locher, CFA

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Marshall Dong

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Katy Fang, CFA*

Hailey Xu, CFA*

Michael Gianatasio

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David Rains, CFA

Taylor Alan-Lee, CFA

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Seema Bains

Jackson Anhut

Danielle Durkovic

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Turner Swan
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CONSULTANT RELATIONS

Jerry MacDonald

INSTITUTIONAL SALES

John Landau

Colin McGeehin, CFA

INTERMEDIARY | NATIONAL ACCOUNTS

David Hissey

Danny O'Donnell, CFA

Kathryn Hall

PRODUCT MANAGEMENT

Kevin Moutes

Sandi Kageyama

HUMAN RESOURCES

Jaime Rochon
Director of Human Resources

Maki Vance

Jules Kaericher

OPERATIONS | ADMINISTRATION

Gracie Fermelia
Chief Operating Officer

LEGAL | COMPLIANCE

Kurt Decko
General Counsel, CCO

Gretchen Corbell

Mindy Yu

Kevin Hu

Christina Vaughan-Lahner

Jonathan Hu

PORTFOLIO SERVICES

Keisha Moore
Director of Operations

Jason Aiello

James Villaroman

Sterling Kawamata

Tom Chang

Trent Ashby

Sindy Fabrizio

FUND ADMINISTRATION

Faith Kim

TRADING

Richard Ingram
Head Trader

Steve Kinomoto

FINANCE | RISK

Daniel Pham
CFO, Risk Officer

Brooke Tarkashvand

TECHNOLOGY

Pete Petersen
Chief Technology Officer

Steve Cooper

Taline Hagopian

Kumar Mahadeva

Ben Farol

Joe Bergstrom

James Reynolds

Nathan Chang

Ahmad Hosein

Jacob Diamond

Nicholas Gibson

Phoebe Hardwicke

Simeon Wilson

**Fusheng Li is an employee of both Causeway Capital Management LLC, where he serves as US portfolio manager of its China equity strategy, and its wholly foreign owned subsidiary, Causeway (Shanghai) Information Consulting Co., Ltd., where he is the general manager. Michael Lu, Katy Fang, Chang Hu, and Hailey Xu are employees of Causeway (Shanghai) Information Consulting Co., Ltd.*

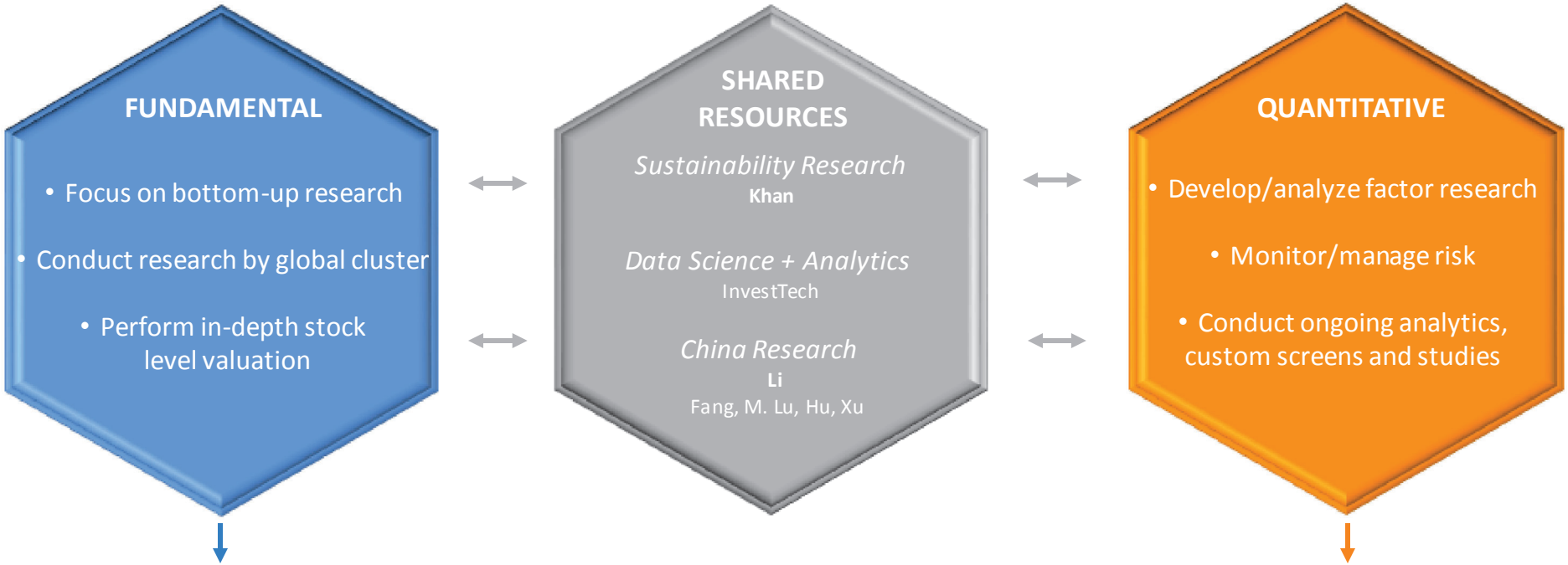
Research Experience, Depth and Continuity

Name	Portfolio Manager	Yrs w/ Team	Investment Experience
Sarah Ketterer	Fundamental	33	37
Harry Hartford	Fundamental	29	39
Jonathan Eng	Fundamental	27	31
Duff Kuhnert, CFA	Quantitative	27	28
Conor Muldoon, CFA	Fundamental	19	27
Joe Gubler, CFA	Quantitative	18	18
Arjun Jayaraman, PhD, CFA	Quantitative	17	25
Alessandro Valentini, CFA	Fundamental	16	21
Ellen Lee	Fundamental	15	19
Steven Nguyen, CFA	Fundamental	11	20
Fusheng Li, MD, PhD, CFA*	Fundamental, Director of Research - China	10	10
Ryan Myers	Quantitative	9	17
Brian Woonhyung Cho	Fundamental	9	17
Mozaffar Khan, PhD	Quantitative, Director of Sustainability Research	6	18
	Mean # of years:	**18**	**23**
	Associate Portfolio Manager		
Greg Squires, CFA	Fundamental	9	14
Reid Ross, CFA	Fundamental	4	17
	Senior Research Analysts		
Mike Cho, CFA	Fundamental	8	16
Ross Locher, CFA	Fundamental	7	12
Nate Klein, CFA	Fundamental	6	12
Andrew Zhang, CFA	Fundamental	6	9
Andrew Liu, CFA	Quantitative	4	11
Spenser May, CFA	Fundamental	4	10
Tong Lu	Quantitative	4	7
Jonny Shea	Fundamental	2	10
Naveen Bobba	Fundamental	1	22
Gavin Scott	Fundamental	0	8
Bennett Bullock	Quantitative	0	15
	Research Analysts		
David Khoo, CFA	Fundamental	4	13
Michael Lu, CFA*	Fundamental	3	6
Katy Fang, CFA*	Fundamental	2	7
Claudia Crivello	Fundamental	2	2
Chang Hu, CFA*	Fundamental	1	6
Hailey Xu, CFA*	Fundamental	1	6
Huray Basar, CFA	Quantitative	0	7
Michael Gianatasio	Fundamental	0	2
Kate Byrne-Slepicka	Fundamental	0	3
Ryan Greenwald	Fundamental	0	6
Marshall Dong	Quantitative	0	5



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Integrating Fundamental and Quantitative Research



	CLUSTER 1 *FINANCIALS REAL ESTATE*	CLUSTER 2 *TECHNOLOGY COMM. SERVICES*	CLUSTER 3 *UTILITIES/ RENEWABLES*	CLUSTER 4 *INDUSTRIALS/ AUTOS*	CLUSTER 5 *CONSUMER STAPLES*	CLUSTER 6 *CONSUMER DISC.*	CLUSTER 7 *HEALTH CARE*	CLUSTER 8 *ENERGY*	CLUSTER 9 *MATERIALS*	**Strategy Alpha Research Analytics Risk Modeling and Reporting**
	CLUSTER MEMBERS									
Portfolio Manager	**Muldoon** Valentini	**B. Cho**	**Nguyen** Lee	**Eng** Nguyen	**Lee**	**Eng** Lee	**Valentini** Nguyen	**Eng**	**Muldoon** Eng	**Jayaraman** **Kuhnert** **Gubler** **Myers** **Khan**
Associate PM				Ross					Squires	
Sr. Analyst	May Zhang	M. Cho Zhang Bobba Shea		M. Cho Locher	Klein		Klein Scott	Locher	Locher May	Liu T. Lu Bullock
Analyst	Khoo Byrne-Slepicka	Khoo	Greenwald	Gianatasio	Crivello	Crivello		Gianatasio		Basar Dong

Group/Fundamental Heads in bold

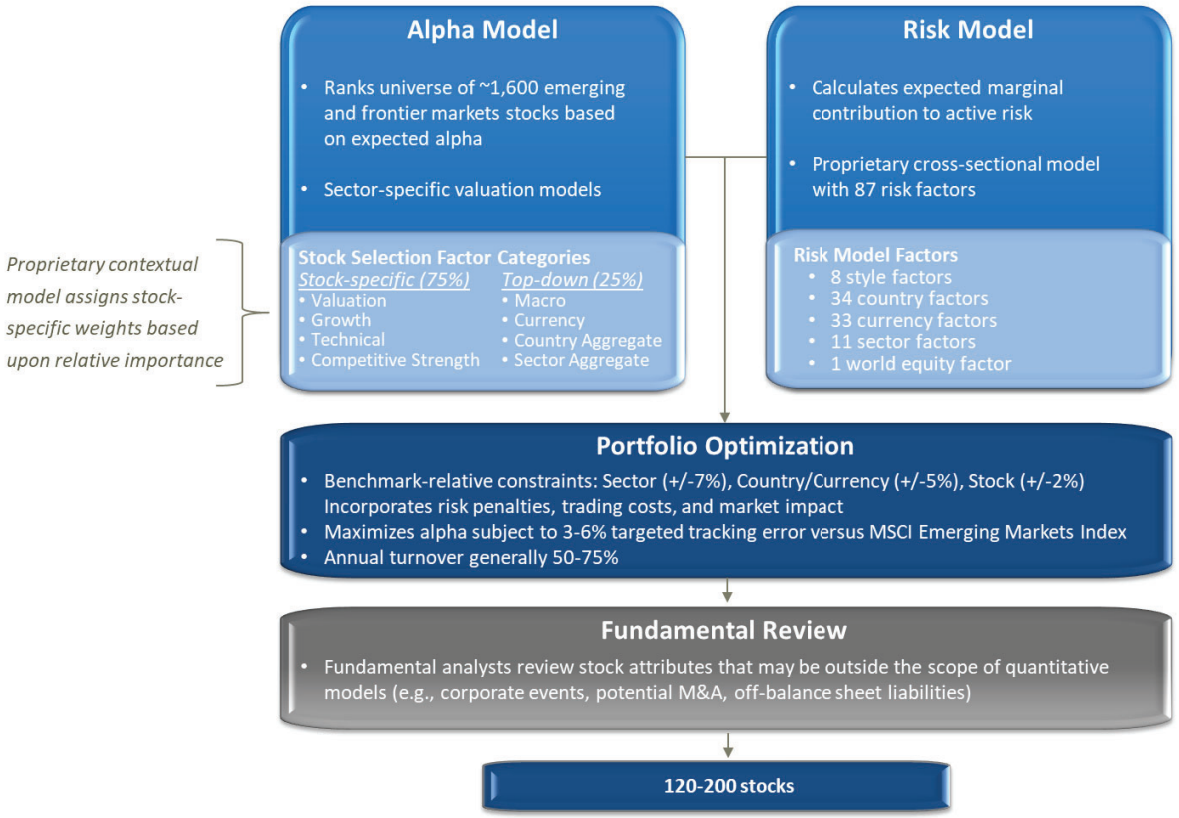
Investment Philosophy & Process – Emerging Markets

> Employ stock ranking and risk models designed for emerging markets

> Optimize portfolio to maximize expected return per unit of risk

> Manage risks:

- Constrain country/sector weights versus benchmark
- Use proprietary quantitative tools



Tracking error, portfolio constraints, turnover, and number of portfolio holdings are targets and may be higher or lower from time to time depending on market conditions

Fund Snapshot

as of March 31, 2023

ASSETS*

Total Assets (USD)	1,248,974,680
Equity	97.73%
Cash	1.60%
Accrued Income	0.63%
Unrealized Gain/Loss on Futures	0.04%
Futures Notional Exposure**	1.24%
Cash (Adjusted)***	0.37%

*Data is from the Investment Adviser's accounting system and will differ from the Fund's official net asset value for reasons including: differences in the accrual of certain expenses and income and recognition of cash flows, and Fund fair valuation. **MSCI EM Index E-Mini Futures. ***Cash (Adjusted) reflects actual cash less futures notional exposure and represents the Fund's effective exposure to cash.

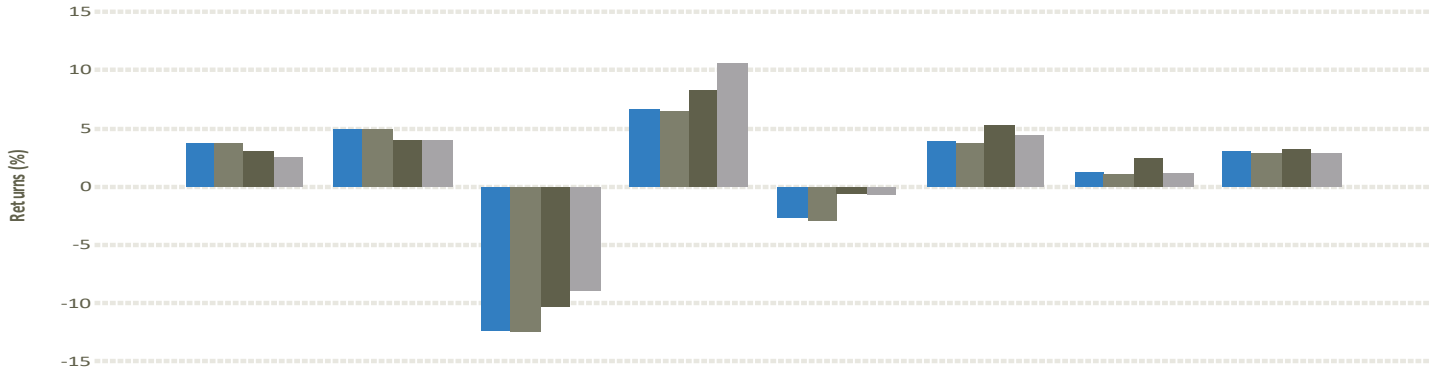
CHARACTERISTICS

	Emerging Markets Fund	MSCI Emerging Markets in USD	MSCI Emerging Markets Value in USD
No. of Holdings	183	1,379	815
Wtd Avg Mkt Cap (Mn)	68,097	72,973	36,886
NTM Price/Earnings	7.0x	10.2x	7.7x
P/B Value	1.0x	1.6x	1.1x
Return on Equity	21.1%	16.0%	13.7%
LTM Wtd Avg Price Momentum	13.9%	1.3%	-1.0%
NTM Wtd Avg EPS Revision	-1.9%	-9.2%	-11.8%

Source: Factset. Wtd Avg Mkt Cap is a weighted average of the total market capitalization of stocks in the portfolio or index. NTM Price/Earnings and Price-to-book ("P/B") value ratio is weighted harmonic average, and return on equity is weighted average. NTM= Next twelve months, LTM= Last twelve months. EPS = earnings per share. Price to earnings is a ratio for valuing a company that measures its current share price relative to its per-share earnings. P/B value evaluates a firm's market value relative to its book value. Return on Equity is calculated as a weighted average, winsorized using maximum Return on Equity figures at 3 standard deviations from the mean (winsorization is a statistical technique intended to remove the impact of outliers). Price momentum measures the velocity of price changes over a fixed time period. EPS (Earnings Per Share) Revision is an aggregate measure of changes in earnings forecasts.

Performance

FUND RETURNS *for the periods ended March 31, 2023*



	Month	Quarter	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception
EM Fund - Instl Class (Net)	3.70	5.00	-12.30	6.61	-2.62	3.95	1.30	3.02
EM Fund - Investor Class (Net)	3.65	4.92	-12.41	6.39	-2.84	3.71	1.06	2.84
MSCI Emerging Markets (Gross)	3.07	4.02	-10.30	8.23	-0.53	5.31	2.37	3.20
MSCI Emerging Markets Value (Gross)	2.50	3.98	-8.87	10.63	-0.64	4.45	1.20	2.85

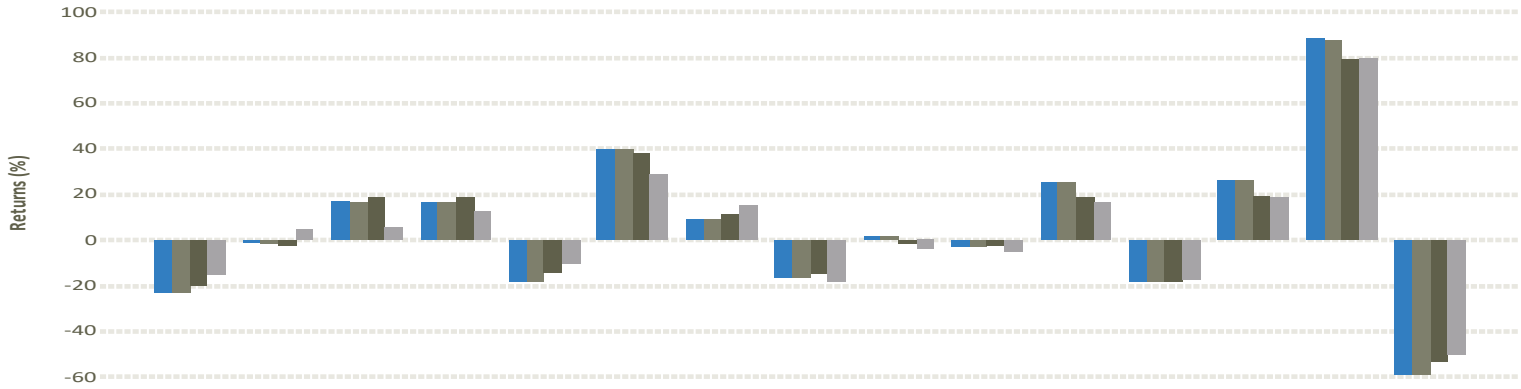
Inception Date: 03/29/2007

The performance quoted represents past performance. Past performance is not an indication of future results. Investment return and the principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth less than their original cost and current performance may be lower than the performance quoted. For performance data current to the most recent month end, please call 1-866-947-7000. Total annual fund operating expenses for the Institutional Class are 1.12% (gross) and are 1.11% (net) after investment adviser fee waiver. Total annual fund operating expenses for the Investor Class are 1.37% (gross) and are 1.36% (net) after investment adviser fee waiver. The waivers are contractual and in effect until 1/31/24. Without the fee waivers total return would be reduced. Total returns assume reinvestment of dividends and capital gains distributions at net asset value when paid. Returns greater than one year are average annual total returns. Investor Class shares charge up to a 0.25% annual shareholder services fee. The Fund's benchmark, the MSCI Emerging Markets Index, is a free float-adjusted market capitalization index, designed to measure equity market performance of emerging markets, consisting of emerging country indices. The MSCI Emerging Markets Value Index captures large and mid cap securities exhibiting overall value style characteristics across emerging country indices. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. The Indices are gross of withholding taxes, assume reinvestment of dividends and capital gains, and assume no management, custody, transaction, or other expenses. It is not possible to invest directly in an index.

MORNINGSTAR Bronze

Calendar Year Performance

FUND RETURNS



	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
EM Fund - Instl Class (Net)	-23.02	-1.30	16.94	16.73	-17.91	39.78	9.21	-16.05	2.07	-2.57	25.80	-18.11	26.29	88.10	-58.45
EM Fund - Investor Class (Net)	-23.18	-1.53	16.72	16.39	-18.07	39.47	8.88	-16.24	1.83	-2.78	25.57	-18.24	26.09	87.93	-58.52
MSCI Emerging Markets (Gross)	-19.74	-2.22	18.69	18.88	-14.25	37.75	11.60	-14.60	-1.82	-2.27	18.63	-18.17	19.20	79.02	-53.18
MSCI Emerging Markets Value (Gross)	-15.31	4.50	5.97	12.52	-10.26	28.67	15.48	-18.16	-3.60	-4.70	16.38	-17.57	18.80	79.70	-50.08

Inception Date: 03/29/2007

The performance quoted represents past performance. Past performance is not an indication of future results. Investment return and the principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth less than their original cost and current performance may be lower than the performance quoted. For performance data current to the most recent month end, please call 1-866-947-7000. Total annual fund operating expenses for the Institutional Class are 1.12% (gross) and are 1.11% (net) after investment adviser fee waiver. Total annual fund operating expenses for the Investor Class are 1.37% (gross) and are 1.36% (net) after investment adviser fee waiver. The waivers are contractual and in effect until 1/31/24. Without the fee waivers total return would be reduced. Total returns assume reinvestment of dividends and capital gains distributions at net asset value when paid. Returns greater than one year are average annual total returns. Investor Class shares charge up to a 0.25% annual shareholder services fee. The Fund's benchmark, the MSCI Emerging Markets Index, is a free float-adjusted market capitalization index, designed to measure equity market performance of emerging markets, consisting of emerging country indices. The MSCI Emerging Markets Value Index captures large and mid cap securities exhibiting overall value style characteristics across emerging country indices. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. The Indices are gross of withholding taxes, assume reinvestment of dividends and capital gains, and assume no management, custody, transaction, or other expenses. It is not possible to invest directly in an index.

MORNINGSTAR Bronze

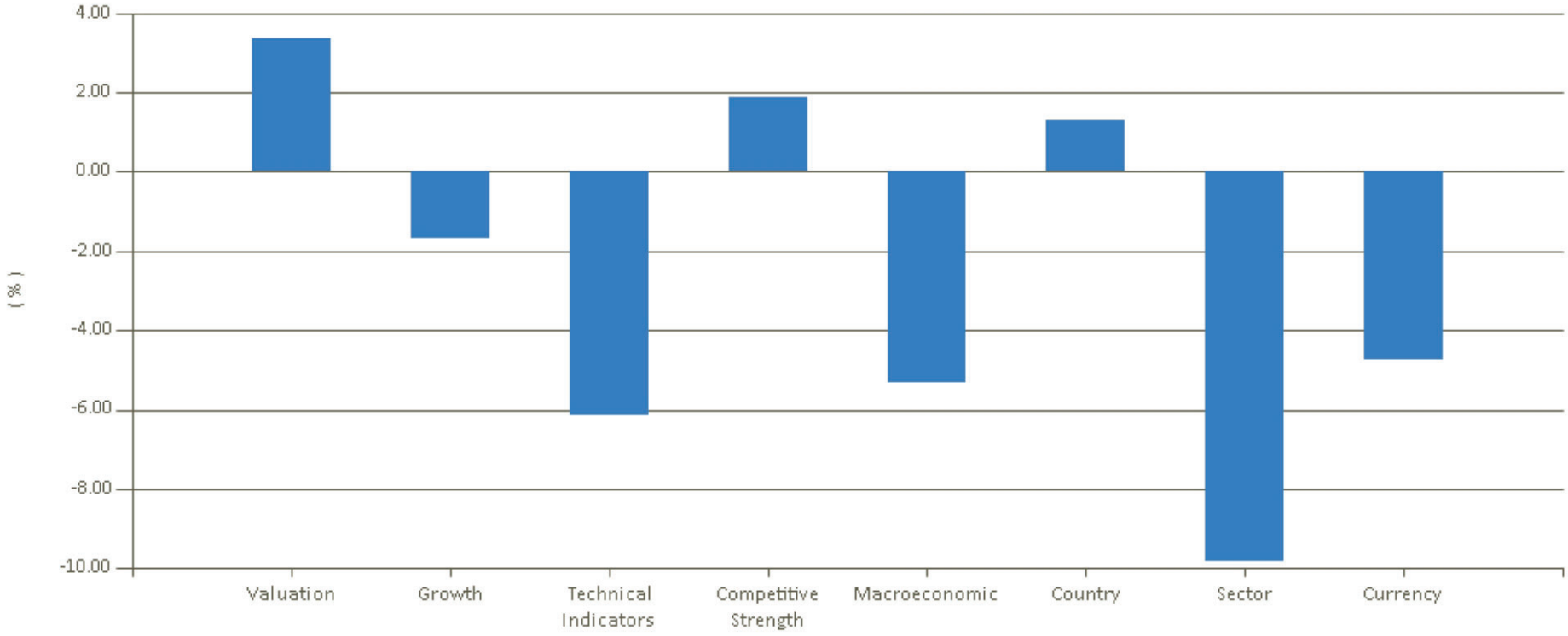
EM Universe Factor Performance

for the quarter ended March 31, 2023

EMERGING MARKETS FACTORS

Factors Driving Security Selection:	Bottom-Up Factors (75%)	Top-Down Factors (25%)
	- Valuation	- Macroeconomic
	- Growth	- Country Aggregate
	- Technical Indicators	- Sector Aggregate
	- Competitive Strength	- Currency

FACTOR PERFORMANCE

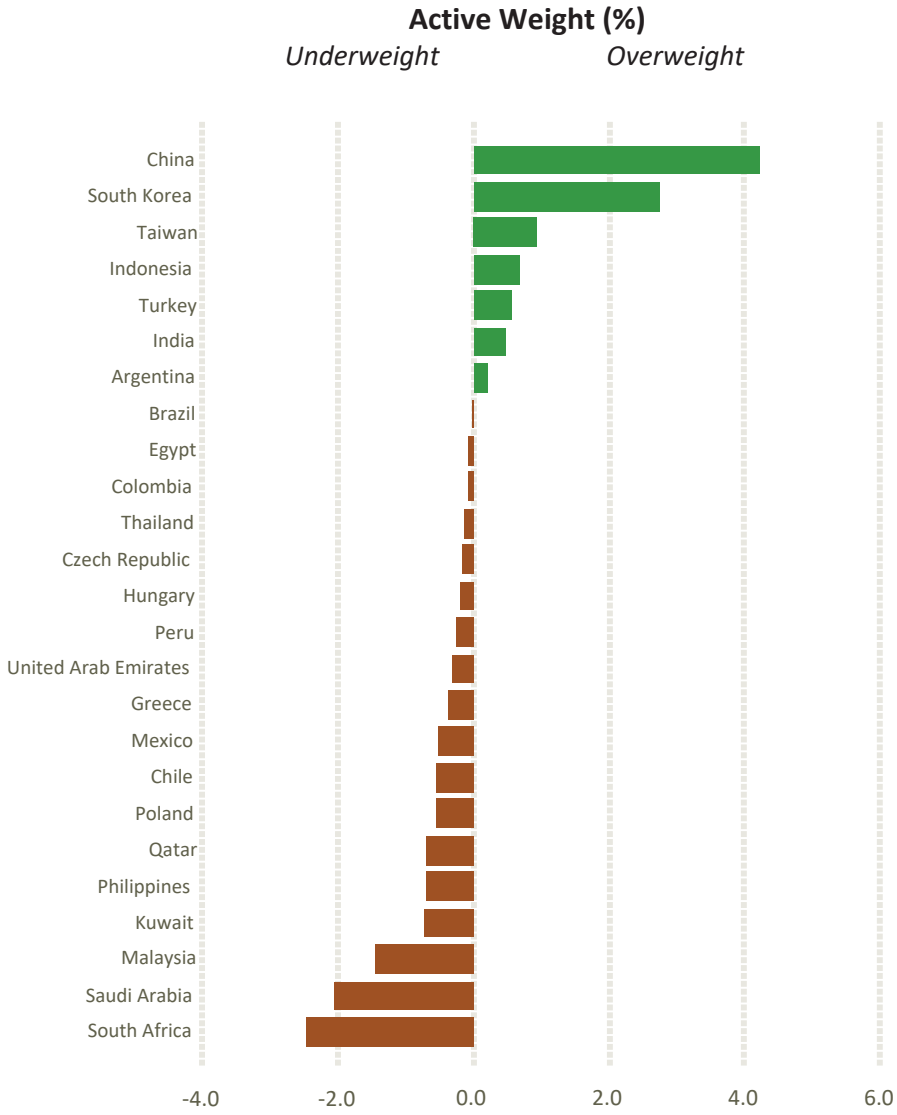


The Causeway Emerging Markets strategy uses quantitative factors that can be grouped into the listed eight categories. The relative return attributed to a factor is the difference between the equally-weighted average return of the highest ranked quintile of companies in the strategy's emerging markets universe based on that factor and that of the lowest ranked quintile of companies. Holdings are subject to change.

Geographic Exposure and Index Performance

for the quarter ended March 31, 2023

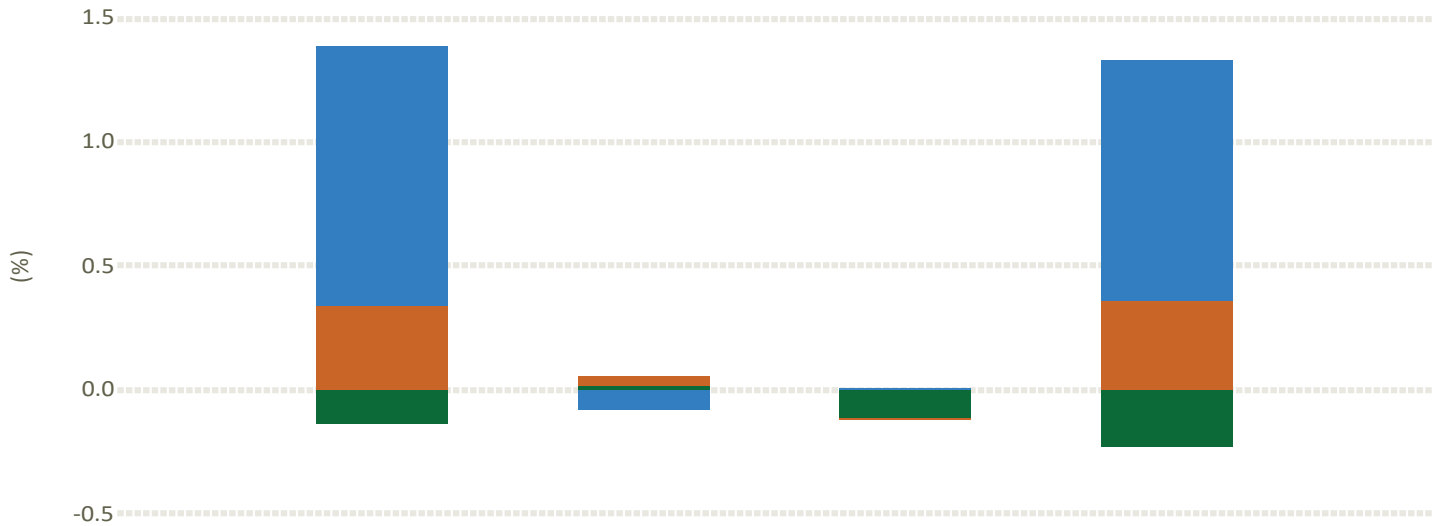
	Portfolio Weights (%)	MSCI EM in USD Weights (%)	Active Weight (%)	Index Returns (%)
China	36.9	32.7	4.2	4.7
India	13.4	13.0	0.5	-6.3
Indonesia	2.6	1.9	0.7	6.5
Malaysia	0.0	1.5	-1.5	-3.6
Philippines	0.0	0.7	-0.7	2.7
South Korea	14.7	11.9	2.7	9.7
Taiwan	16.2	15.2	0.9	14.8
Thailand	2.0	2.1	-0.1	-1.6
Emerging Asia	**85.7**	**79.0**	**6.7**	**-**
Czech Republic	0.0	0.2	-0.2	33.0
Egypt	0.0	0.1	-0.1	-3.6
Greece	0.0	0.4	-0.4	15.8
Hungary	0.0	0.2	-0.2	2.9
Kuwait	0.1	0.9	-0.7	-3.7
Poland	0.1	0.7	-0.6	-1.0
Qatar	0.2	0.9	-0.7	-0.7
Saudi Arabia	1.8	3.9	-2.1	0.1
South Africa	1.0	3.5	-2.5	-0.4
Turkey	1.2	0.6	0.6	-9.2
United Arab Emirates	0.9	1.2	-0.3	-7.5
Emerging Europe, Middle East,	**5.5**	**12.6**	**-7.1**	**-**
Argentina	0.2	0.0	0.2	0.0
Brazil	4.9	4.9	0.0	-3.1
Chile	0.0	0.6	-0.6	5.9
Colombia	0.0	0.1	-0.1	-13.1
Mexico	2.1	2.6	-0.5	20.4
Peru	0.0	0.3	-0.3	8.3
Emerging Latin America	**7.2**	**8.4**	**-1.3**	**-**
EQUITY	**98.4**	**100.0**	**-**	**-**
CASH	**1.6**	**0.0**	**-**	**-**
TOTAL	**100.0**	**100.0**	**-**	**4.0**
* Futures Notional Exposure	1.2%			
** Cash (Adjusted)	0.4%			



Equity includes percentage of accrued income. Active weight defined as Fund weight minus Index weight. *MSCI EM Index E-Mini Futures. Futures notional exposure is not included in the Geographic Exposure chart. The Unrealized Gain/Loss is reflected as the % weight in the portfolio. **Cash (Adjusted) reflects actual cash less futures notional exposure and represents the Fund's effective exposure to cash. Index returns are in base currency. Index returns are for illustrative purposes only and do not represent actual Fund performance. Index returns do not reflect any management fees, transactior costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

Regional Attribution

FUND vs. MSCI Emerging Markets in USD (Gross) *for the quarter ended March 31, 2023*



	Emerging Asia	Emerging Europe, Middle East, Africa	Emerging Latin America	Total
Stock Selection	1.05	-0.08	0.01	0.98
Country Allocation	0.34	0.04	-0.01	0.36
Currency	-0.13	0.01	-0.11	-0.23
Subtotal	1.25	-0.03	-0.12	1.11
Cash & Index Futures/ETFs				-0.04
Total				1.06

Stock Selection: Positive - Relative outperformance (0.88%) was due to holdings in India, Taiwan, and Saudi Arabia; relative underperformance was due to holdings in South Korea, South Africa, and Thailand.

Country Allocation: Positive - Relative outperformance (0.33%) resulted from an overweighting in South Korea and China, as well as an underweighting in Malaysia; relative underperformance resulted from an overweighting in Thailand, as well as an underweighting in Taiwan and Mexico.

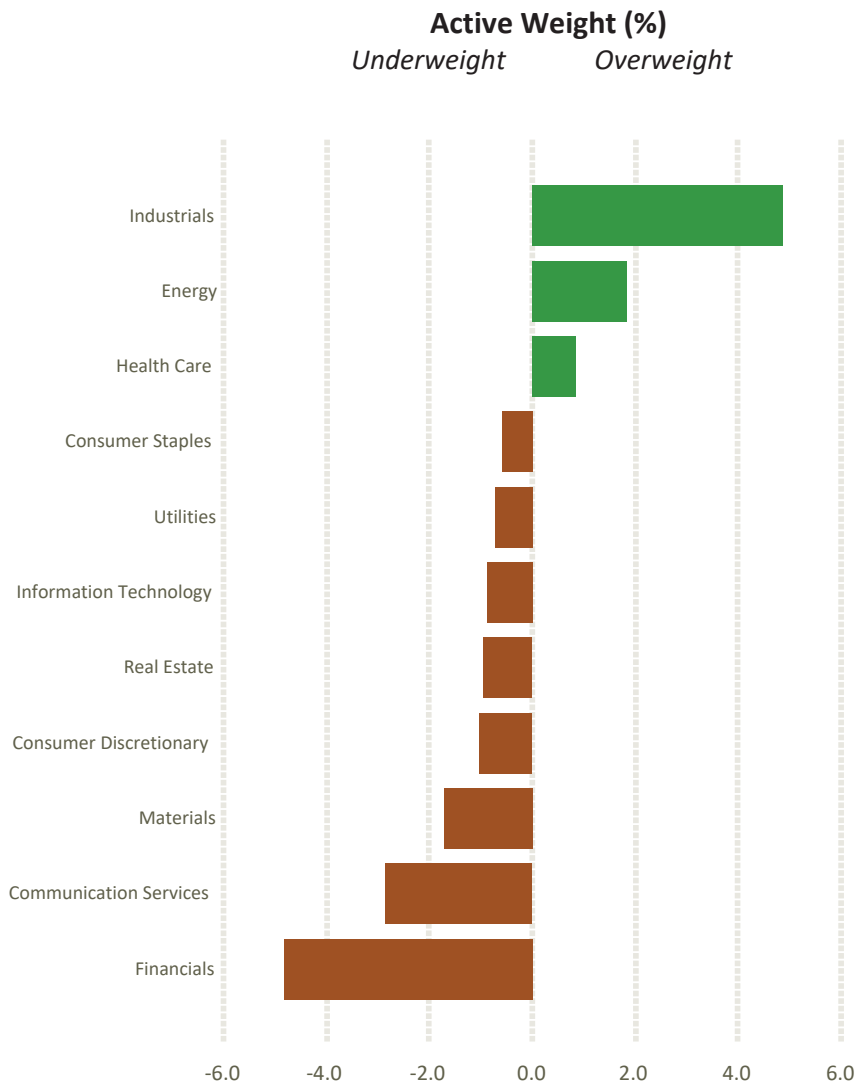
Currency: Negative - Relative underperformance (-0.15%) resulted from an overweighting in South Korean won and Hong Kong dollar, as well as an underweighting in Mexican peso; relative outperformance resulted from an overweighting in Indonesian rupiah, as well as an underweighting in South African rand and Egyptian pound.

This chart shows where the Fund's investments in a region performed better or worse than the region in the benchmark index during the quarter. Attribution is based on the return of the Fund's holdings gross of management fees and other expenses and before any Fund fair valuation. Performance quoted is past performance. Past performance is not an indication of future results.

Industry Group & Sector Exposure and Performance

WEIGHTS *as of March 31, 2023*

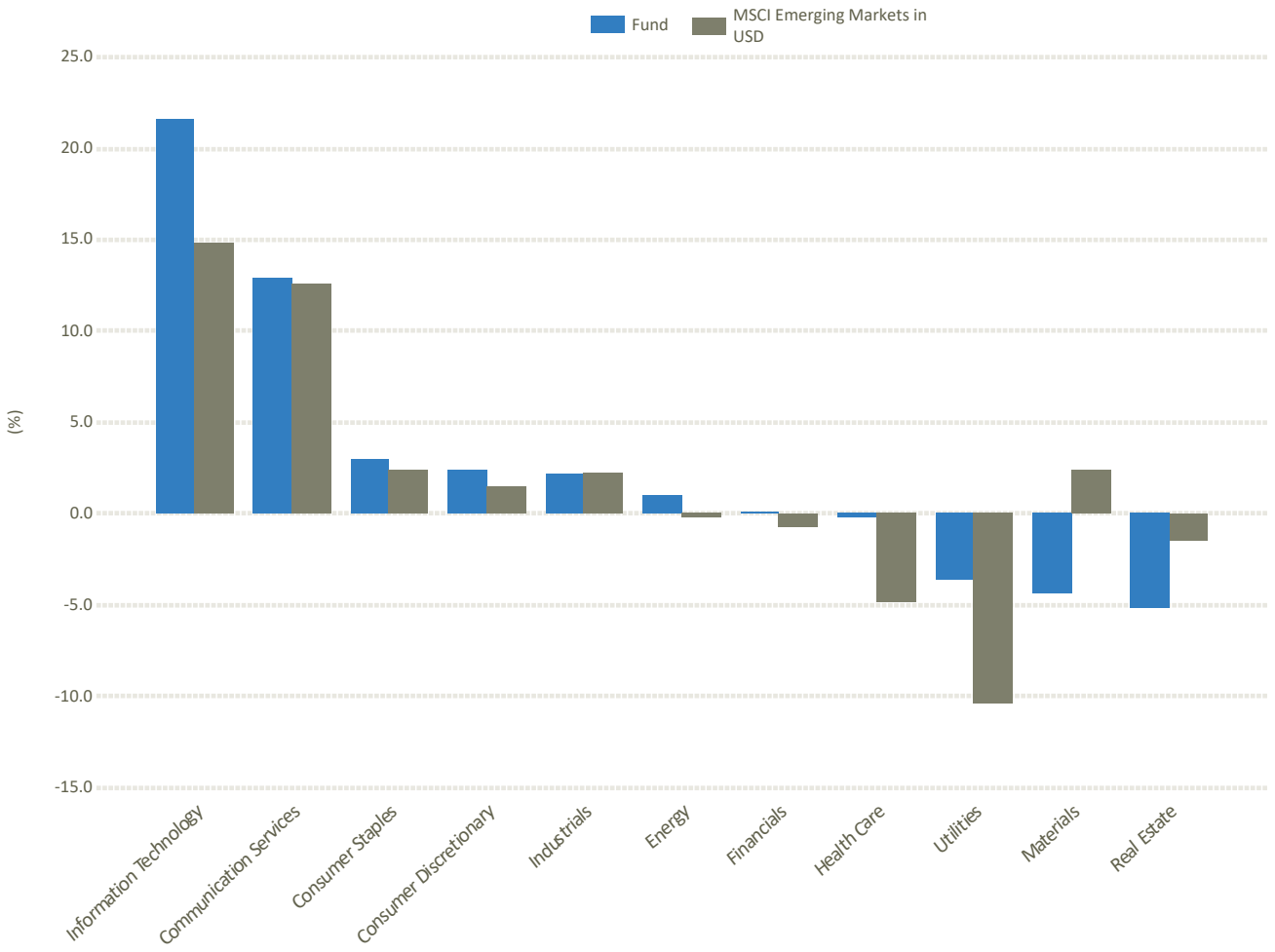
	Portfolio Weights (%)	MSCI EM in USD Weights (%)	Active Weight (%)
Media & Entertainment	7.0	7.5	-0.5
Telecommunication Services	0.7	3.0	-2.3
Communication Services	**7.7**	**10.6**	**-2.9**
Automobiles & Components	3.7	3.3	0.4
Consumer Discretionary Distribution & Retail	7.9	7.6	0.2
Consumer Durables & Apparel	1.3	1.6	-0.2
Consumer Services	0.0	1.5	-1.5
Consumer Discretionary	**12.9**	**13.9**	**-1.0**
Consumer Staples Distribution & Retail	0.2	1.4	-1.2
Food Beverage & Tobacco	4.9	4.0	0.8
Household & Personal Products	0.6	0.9	-0.3
Consumer Staples	**5.7**	**6.3**	**-0.6**
Energy	6.6	4.7	1.8
Energy	**6.6**	**4.7**	**1.8**
Banks	11.1	15.2	-4.1
Financial Services	2.3	3.1	-0.8
Insurance	2.8	2.7	0.1
Financials	**16.2**	**21.0**	**-4.8**
Health Care Equipment & Services	2.1	1.1	1.1
Pharmaceuticals & Biotechnology	2.4	2.7	-0.3
Health Care	**4.6**	**3.8**	**0.8**
Capital Goods	6.9	3.9	3.0
Commercial & Professional Services	0.1	0.1	0.1
Transportation	3.8	2.0	1.8
Industrials	**10.8**	**6.0**	**4.8**
Semiconductors & Semi Equipment	10.7	9.6	1.1
Software & Services	0.8	2.5	-1.7
Technology Hardware & Equipment	8.2	8.5	-0.3
Information Technology	**19.7**	**20.5**	**-0.9**
Materials	6.9	8.6	-1.7
Materials	**6.9**	**8.6**	**-1.7**
Warrants	4.4	0.0	4.4
Other	**4.4**	**0.0**	**4.4**
Equity Real Estate Investment Trusts (REITs)	1.0	1.9	-0.9
Real Estate	**1.0**	**1.9**	**-0.9**
Utilities	1.9	2.6	-0.7
Utilities	**1.9**	**2.6**	**-0.7**
EQUITY	**98.4**	**100.0**	**-**
CASH	**1.6**	**0.0**	**-**
TOTAL	**100.0**	**100.0**	**-**



Equity includes percentage of accrued income. Active weight defined as Fund weight minus Index weight. Index source: MSCI. Indexes are unmanaged and one cannot invest directly in an index.

Sector Performance

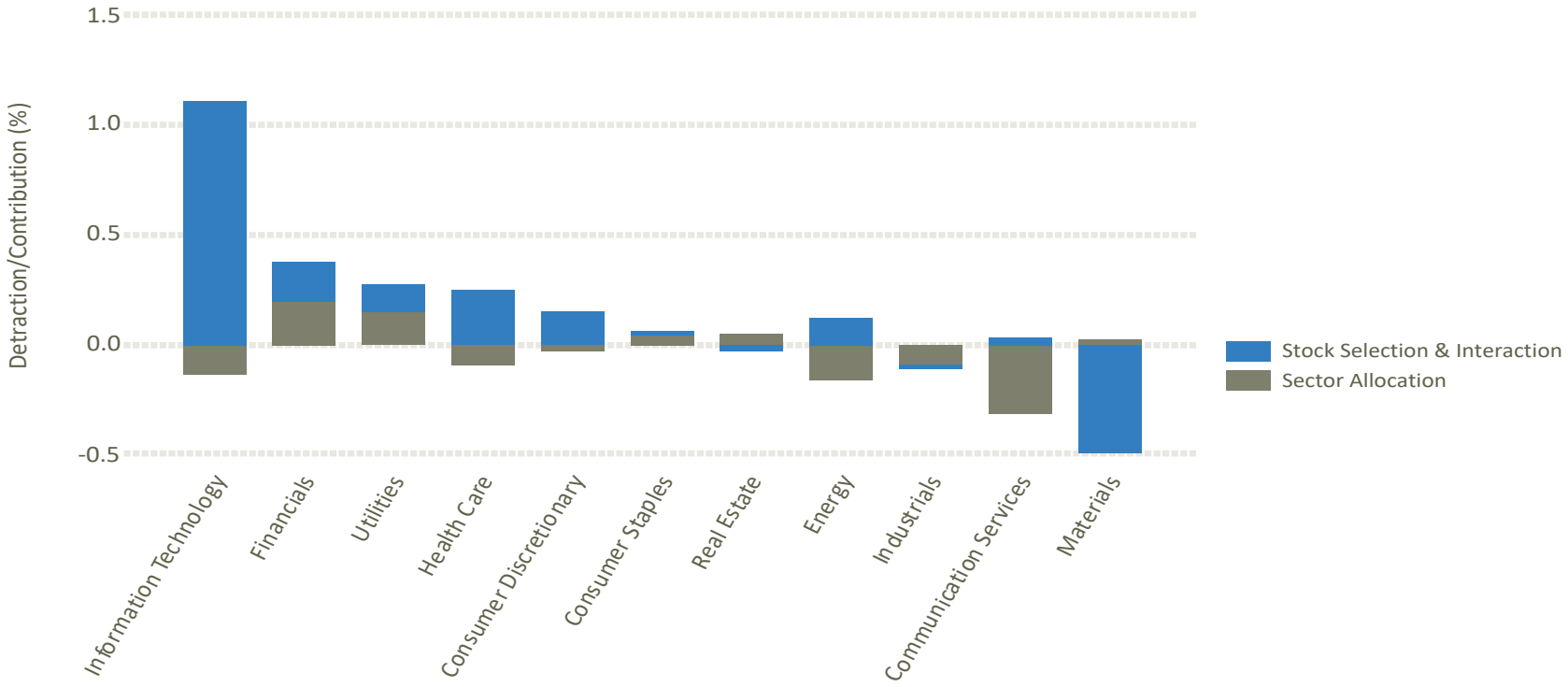
RETURNS *for the quarter ended March 31, 2023*



Fund sector performance is gross of management fees and other expenses and before any Fund fair valuation. Index source: MSCI. Index returns are in base currency. Index returns are for illustrative purposes only and do not represent actual Fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results. Performance quoted is past performance. Past performance is not an indication of future results.

Sector Attribution

FUND vs. MSCI Emerging Markets in USD (Gross) *for the quarter ended March 31, 2023*



Stock Selection & Interaction: Positive - Relative outperformance (1.64%) was due to holdings in information technology, health care, and financials; relative underperformance was due to holdings in materials, real estate, and industrials.

Sector Allocation: Negative - Relative underperformance (-0.60%) resulted from an overweighting in energy, as well as an underweighting in communication services and information technology; relative outperformance resulted from an underweighting in financials, utilities, and real estate.

This chart shows where the Fund's investments in a sector performed better or worse than the region in the benchmark index during the quarter. Attribution is based on the return of the Fund's holdings gross of management fees and other expenses and before any Fund fair valuation. Performance quoted is past performance. Past performance is not an indication of future results.

Relative Significant Contributors and Detractors

for the quarter ended March 31, 2023

Largest Relative Contributors

Company Name	Active * Weight	Portfolio Return	Benchmark Return	Attribution ** Effect	Country	Industry Group
Kia Corp.	1.7%	32.1%	33.7%	0.33%	South Korea	Automobiles & Components
Taiwan Semiconductor Manufacturing Co.,	0.1%	25.3%	20.6%	0.31%	Taiwan	Semiconductors & Semi Equipment
Banco do Brasil SA	1.6%	20.8%	20.8%	0.22%	Brazil	Banks
PetroChina Co., Ltd.	0.9%	29.4%	28.7%	0.17%	China	Energy
Reliance Industries Ltd.	-1.3%	0.0%	-7.9%	0.17%	India	Energy
Adani Total Gas Ltd.	0.0%	0.0%	-76.3%	0.15%	India	Utilities
Lenovo Group Ltd.	0.7%	31.8%	31.8%	0.14%	China	Technology Hardware & Equipment
Adani Enterprises Ltd.	-0.1%	0.0%	-54.3%	0.13%	India	Capital Goods
POSCO Holdings Inc.	0.7%	28.8%	29.5%	0.12%	South Korea	Materials
Daqo New Energy	0.7%	21.3%	21.3%	0.10%	China	Semiconductors & Semi Equipment

Largest Relative Detractors

Company Name	Active * Weight	Portfolio Return	Benchmark Return	Attribution ** Effect	Country	Industry Group
JD.com, Inc.	-0.1%	-22.2%	-22.3%	-0.20%	China	Consumer Discretionary Distribution & Retail
Tencent Holdings Ltd.	-0.7%	21.1%	21.1%	-0.17%	China	Media & Entertainment
Türk Hava Yollari AO	0.6%	-17.9%	-18.0%	-0.15%	Turkey	Transportation
Bank of Baroda	0.8%	-8.6%	6.8%	-0.13%	India	Banks
JBS SA	0.5%	-15.7%	-15.5%	-0.11%	Brazil	Food Beverage & Tobacco
SD Biosensor, Inc.	0.2%	-33.3%	-32.9%	-0.11%	South Korea	Health Care Equipment & Services
MediaTek, Inc.	-0.6%	0.0%	27.1%	-0.11%	Taiwan	Semiconductors & Semi Equipment
Gerdau SA	0.8%	-8.9%	-5.1%	-0.11%	Brazil	Materials
Hindalco Industries	0.5%	-13.8%	-13.8%	-0.10%	India	Materials
African Rainbow Minerals Ltd.	0.4%	-18.6%	-18.6%	-0.10%	South Africa	Materials

Source: Factset. *Active Weight defined as Portfolio ending weight minus MSCI Emerging Markets Index ending weight. **Largest relative contributors and detractors based on total effect relative to the MSCI Emerging Markets Index. Index returns are in base currency. Index returns are for illustrative purposes only and do not represent actual Fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results. Holdings are subject to change.

Significant Changes

for the quarter ended March 31, 2023

Increases	Country	Industry Group	% Beginning Weight	% Ending Weight
Novatek Microelectronics Corp.	Taiwan	Semiconductors & Semi Equipment	0.00%	0.95%
Gerdau SA	Brazil	Materials	0.00%	0.84%
Ping An	China	Insurance	0.00%	0.80%
Guanghui Energy Co	China	Energy	0.00%	0.72%
Varun Beverages Ltd.	India	Food Beverage & Tobacco	0.00%	0.64%
OCI Co., Ltd.	South Korea	Materials	0.00%	0.55%
Gigabyte Technology Co., Ltd.	Taiwan	Technology Hardware & Equipment	0.10%	0.57%
Binjiang Group	China	Equity Real Estate Investment Trusts	0.00%	0.47%
Britannia Industries Ltd.	India	Food Beverage & Tobacco	0.00%	0.43%
China State Constrn & Engineering Corp.	China	Capital Goods	0.28%	0.69%

Decreases	Country	Industry Group	% Beginning Weight	% Ending Weight
Tongwei Co	China	Food Beverage & Tobacco	0.67%	0.00%
PTT Exploration & Production Plc	Thailand	Energy	0.65%	0.01%
China Shenhua Energy Co	China	Energy	0.59%	0.00%
National Bank of Kuwait SAK	Kuwait	Banks	0.59%	0.00%
LG Innotek Co., Ltd.	South Korea	Technology Hardware & Equipment	0.60%	0.01%
Unimicron Technology Corp.	Taiwan	Technology Hardware & Equipment	0.57%	0.00%
Emaar Properties PJSC	United Arab	Real Estate	0.57%	0.00%
Maruti Suzuki India Ltd.	India	Automobiles & Components	0.53%	0.00%
Sasol Ltd.	South Africa	Materials	0.50%	0.00%
Taiwan Semiconductor Manufacturing Co., Ltd.	Taiwan	Semiconductors & Semi Equipment	6.19%	6.63%

Holdings are subject to change. Current and future holdings subject to risk.

Top 10 Active Holdings*

as of March 31, 2023

Company Name	Portfolio Weight (%)	MSCI EM in USD Weight (%)	Active Weight (%)	Country	Industry Group
China Construction Bank Corp.	2.95	0.96	1.99	China	Banks
Kia Corp.	1.97	0.25	1.72	South Korea	Automobiles & Components
Banco do Brasil SA	1.73	0.10	1.63	Brazil	Banks
PICC Property & Casualty Co., Ltd.	1.22	0.11	1.11	China	Insurance
Tencent Music Entertainment Gr	1.15	0.09	1.06	China	Media & Entertainment
Oil & Natural Gas Corp. Ltd.	1.07	0.07	1.00	India	Energy
Hon Hai Precision Industry Co., Ltd.	1.62	0.65	0.97	Taiwan	Technology Hardware & Equipment
Hana Financial Group, Inc.	1.10	0.14	0.96	South Korea	Banks
Vipshop Holdings	1.04	0.10	0.94	China	Consumer Discretionary Distribution & Retail
PetroChina Co., Ltd.	1.12	0.21	0.91	China	Energy

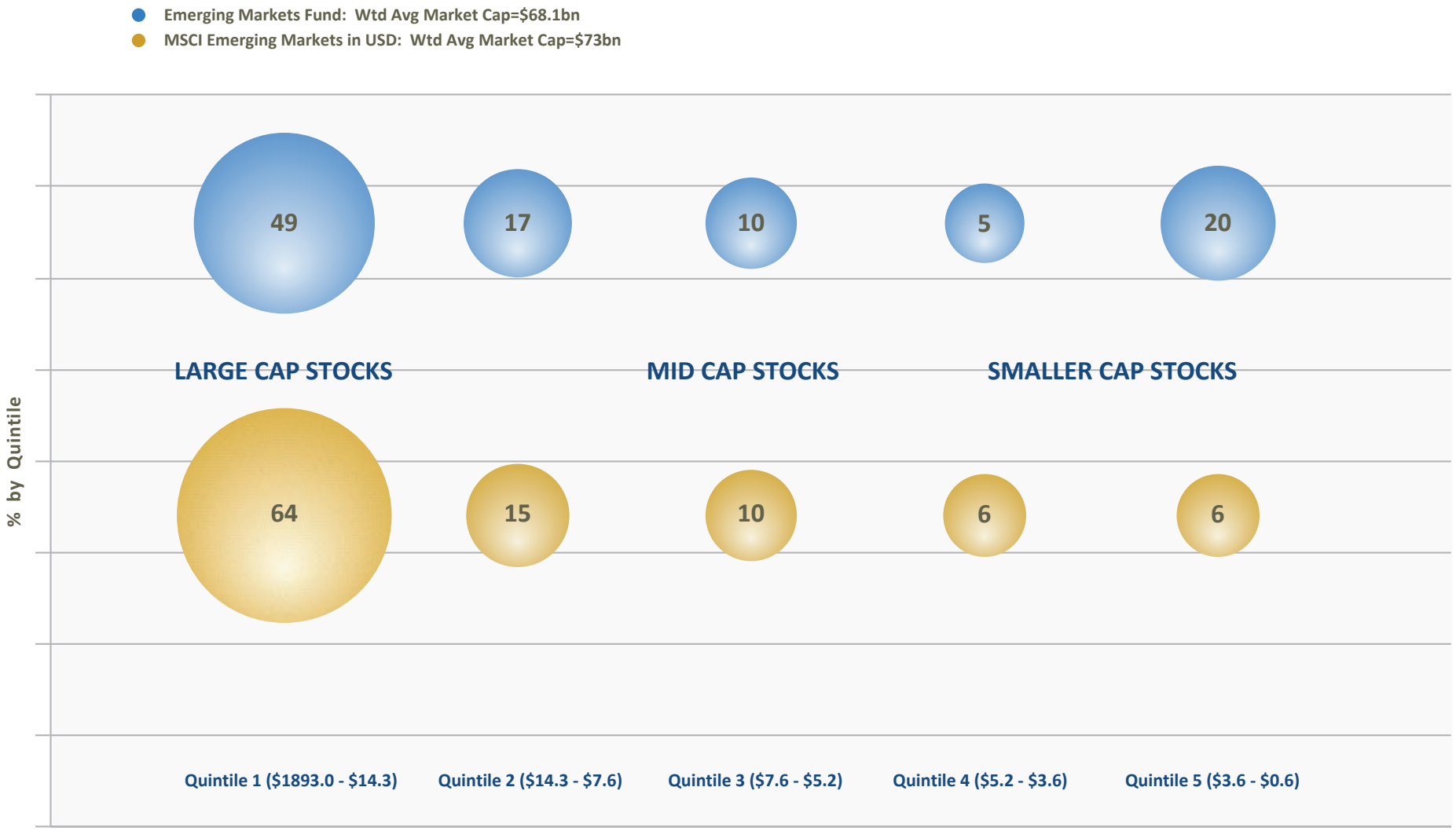
*Active defined as Fund weight minus MSCI EM Index weight.

The holdings identified above can and will differ from the Fund's Top 10 Holdings measured by Fund weight.

Holdings are subject to change. Current and future holdings subject to risk.

EM Market Cap Exposure

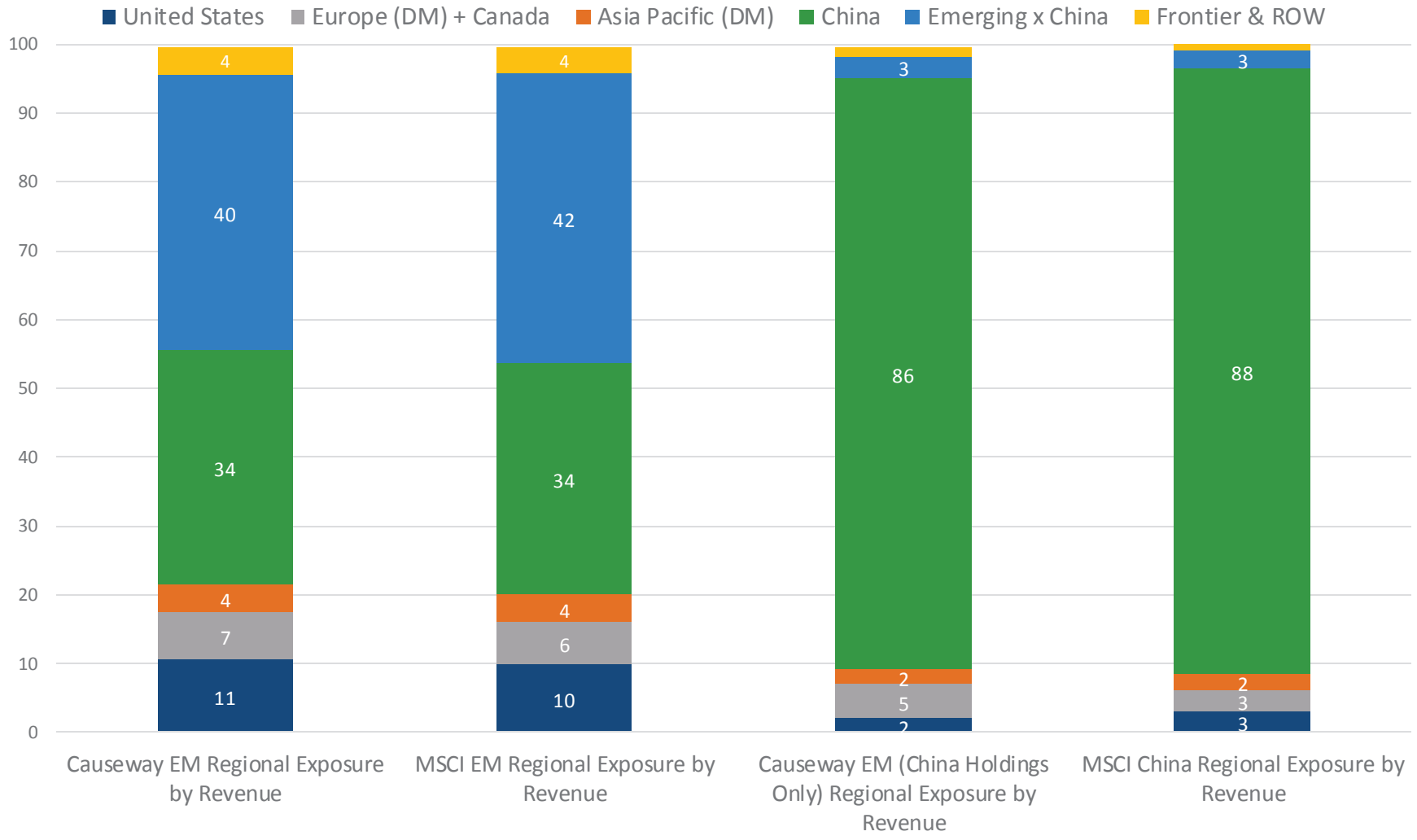
as of March 31, 2023



Excludes cash and ETFs. Quintiles calculated by reference to MSCI Emerging Markets Index plus the Fund's holdings. Subject to change.

Geographic Exposure By Company Revenues

PORTFOLIO'S CHINA HOLDINGS HAVE MINIMAL EXPOSURE TO THE US



Data sources: FactSet, Bloomberg, Causeway Analytics

Causeway estimates are based on latest available revenues reported by companies in a representative account portfolio on 3/31/2023, proportionate to holding weights. Israel is classified as Europe.

Factor Performance - Emerging Markets Equity (gross of fees)

YTD through March 31, 2023

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bottom-Up Factors	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
B/P	1.1	1.8	19.2	-6.9	-4.9	-4.5	-7.2	1.3	-5.9	6.5	-4.6	1.8	-11.8	-2.4	6.9	8.0	3.3
E/P	-6.7	5.5	31.2	11.2	2.2	9.3	-0.1	3.8	2.2	1.4	7.7	3.3	-6.4	-14.6	14.8	9.1	1.2
CFO/P, EBITDA/ EV Composite	6.6	6.8	20.7	5.0	1.3	7.5	-4.9	6.0	3.1	11.8	5.4	1.9	-7.7	-17.4	19.6	4.6	1.9
Sales/EV	14.2	8.3	17.6	-0.2	0.0	2.0	-13.4	8.1	-4.9	12.5	-4.8	5.9	-13.0	-16.8	12.3	9.7	2.2
(Dividends +Buybacks)/P	-3.9	13.1	-0.7	8.5	9.9	8.3	2.4	9.8	7.0	8.9	-2.3	10.7	-5.6	-16.8	12.0	5.9	2.6
Target Price/Price	-7.9	-9.0	8.4	7.8	6.0	6.4	3.0	-0.7	2.2	7.1	-1.2	2.5	0.7	-6.6	3.7	5.1	2.0
VALUATION COMPOSITE	-1.4	8.2	24.4	6.4	3.9	11.2	-2.1	5.7	1.7	12.2	1.8	7.5	-5.9	-16.5	13.7	9.1	3.4
GROWTH	29.9	-1.9	-18.8	12.5	20.4	21.5	28.5	15.7	12.5	7.0	20.0	5.6	4.5	16.0	20.2	3.2	-1.7
TECHNICAL (Price Momentum)	33.1	-7.5	-45.6	14.0	8.1	12.5	23.5	6.9	8.0	-7.6	10.7	-5.4	14.1	25.3	22.8	2.8	-6.2
COMPETITIVE STRENGTH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-10.7	1.9
Top-Down Factors																	
MACROECONOMIC	8.9	-17.1	16.4	-8.3	-1.8	-12.6	23.5	14.1	20.7	-41.1	3.2	-5.3	19.7	-1.6	7.7	-17.3	-5.3
COUNTRY AGGREGATE	-22.5	-8.4	-11.3	-3.3	2.2	-2.9	15.9	-9.4	18.6	-14.1	2.7	-4.4	3.3	23.9	-19.6	-17.6	1.3
SECTOR AGGREGATE	-7.5	6.7	12.9	-10.2	5.9	8.4	10.1	9.2	2.8	-12.3	0.0	13.8	9.1	-30.0	9.3	11.9	-9.8
CURRENCY	-	12.9	1.6	-1.1	7.2	4.8	5.5	1.7	15.8	-5.8	9.0	15.5	2.2	15.6	4.1	-17.2	-4.8
Dynamic Risk Factors																	
Low Financial Leverage	-5.8	11.0	-4.8	6.8	9.0	-1.5	7.8	0.7	3.2	-0.8	-0.1	-0.2	0.9	7.8	-5.3	-4.5	0.5
Low Volatility	-12.0	37.0	-43.0	4.7	22.0	9.0	9.4	6.3	7.1	0.5	-8.9	13.0	-4.1	-5.0	13.0	4.7	2.2
Low Earnings Uncertainty	-10.7	18.5	-1.1	14.3	8.1	14.3	2.6	-4.6	6.5	-5.4	-3.3	5.3	-16.2	-5.5	0.9	-1.4	4.4
Defensive	-17.1	13.8	-56.3	3.9	17.2	-0.1	-0.6	13.7	-5.1	-1.5	-22.0	9.0	-8.2	-14.9	5.6	10.4	-0.6
Piotroski F	-3.7	-4.5	-22.5	14.8	11.1	6.6	12.1	3.4	3.9	1.4	8.0	-1.7	8.3	4.4	5.5	-7.8	2.2
Size	8.5	3.2	-47.0	-9.8	11.3	2.0	-3.3	-1.4	2.9	5.0	0.8	11.5	6.0	4.5	0.6	-8.5	-1.6

Annual Style Rotation in Emerging Markets

Last 15 Years (2008-2022)

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EM Low Momentum (47%)	EM Small Cap 114%	EM Small Cap 27%	EM Quality (12%)	EM High Momentum 23%	EM Small Cap 1%	EM Quality 4%	EM Small Cap (7%)	EM Low Momentum 16%	EM Growth 47%	EM Low Momentum (7%)	EM Growth 25%	EM Growth 32%	EM Small Cap 19%	EM Low Momentum (15%)
EM Low Volatility (49%)	EM Low Momentum 108%	EM Quality 25%	EM Low Volatility (13%)	EM Small Cap 23%	EM Growth 0%	EM Small Cap 1%	EM High Momentum (10%)	EM Value 15%	EM High Momentum 43%	EM Value (10%)	EM Low Momentum 23%	EM High Momentum 29%	EM Quality 9%	EM Value (15%)
EM Value (50%)	EM Value 80%	EM High Momentum 23%	EM Large Cap (17%)	EM Growth 21%	EM High Momentum (0%)	EM Growth (0%)	EM Growth (11%)	EM Large Cap 13%	EM Large Cap 38%	EM Low Volatility (11%)	EM Quality 20%	EM Quality 20%	EM Value 4%	EM Low Volatility (17%)
EM Quality (50%)	EM Quality 80%	EM Low Volatility 22%	EM Value (18%)	EM Quality 19%	EM Quality (1%)	EM Low Volatility (1%)	EM Quality (12%)	MSCI EM 12%	MSCI EM 38%	MSCI EM (14%)	EM Large Cap 20%	EM Large Cap 20%	EM Low Volatility 3%	EM Small Cap (18%)
EM Large Cap (53%)	MSCI EM 79%	EM Growth 20%	EM High Momentum (18%)	EM Low Volatility 19%	EM Low Volatility (2%)	EM High Momentum (1%)	EM Low Volatility (14%)	EM Low Volatility 11%	EM Quality 35%	EM Large Cap (15%)	MSCI EM 19%	EM Small Cap 20%	EM High Momentum 3%	MSCI EM (20%)
MSCI EM (53%)	EM Growth 78%	MSCI EM 19%	MSCI EM (18%)	MSCI EM 19%	EM Large Cap (2%)	EM Large Cap (2%)	MSCI EM (15%)	EM High Momentum 9%	EM Low Volatility 35%	EM Quality (16%)	EM Low Volatility 16%	MSCI EM 19%	MSCI EM (2%)	EM Large Cap (20%)
EM High Momentum (55%)	EM Large Cap 76%	EM Value 19%	EM Growth (19%)	EM Large Cap 18%	MSCI EM (2%)	MSCI EM (2%)	EM Large Cap (15%)	EM Growth 8%	EM Small Cap 34%	EM High Momentum (18%)	EM High Momentum 15%	EM Low Volatility 12%	EM Large Cap (4%)	EM High Momentum (21%)
EM Growth (56%)	EM Low Volatility 69%	EM Large Cap 19%	EM Low Momentum (19%)	EM Value 16%	EM Low Momentum (5%)	EM Low Momentum (2%)	EM Value (18%)	EM Quality 7%	EM Value 29%	EM Growth (18%)	EM Value 13%	EM Value 6%	EM Low Momentum (6%)	EM Quality (22%)
EM Small Cap (58%)	EM High Momentum 63%	EM Low Momentum 16%	EM Small Cap (27%)	EM Low Momentum 15%	EM Value (5%)	EM Value (4%)	EM Low Momentum (20%)	EM Small Cap 3%	EM Low Momentum 28%	EM Small Cap (18%)	EM Small Cap 12%	EM Low Momentum 3%	EM Growth (8%)	EM Growth (24%)

Note: "MSCI Emerging Markets" represents MSCI Emerging Markets Index. "Emerging Markets Value" and "Emerging Markets Growth" represent the MSCI Emerging Markets Value Index and the MSCI Emerging Markets Growth Index, respectively. "Emerging Markets Small Cap" and "Emerging Markets Large Cap" represent the MSCI Emerging Markets Small Cap Index and the MSCI Emerging Markets Large Cap Index, respectively. "Emerging Markets Quality" and "Emerging Markets Low Volatility" represent the MSCI Emerging Markets Quality Index and MSCI Emerging Markets Volatility Tilt Index, respectively. "Emerging Markets High Momentum" and "Emerging Markets Low Momentum" represent the geometrically linked float-weighted monthly returns of the top and bottom halves, respectively, of price performers in the MSCI Emerging Markets Index over the previous 12 months. Source: Factset, MSCI, Russell Investment Indices

Quarterly Style Rotation in Emerging Markets

Last 3+ Years (2020 – March 2023)

2020				2021				2022				2023
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
EM High Momentum (19%)	EM Small Cap 27%	EM High Momentum 15%	EM Value 23%	EM Small Cap 8%	EM Small Cap 11%	EM Small Cap (2%)	EM Quality 4%	EM High Momentum (2%)	EM Low Momentum (3%)	EM Small Cap (5%)	EM Low Momentum 17%	EM Low Momentum 8%
EM Growth (19%)	EM Growth 22%	EM Growth 14%	EM Small Cap 22%	EM Value 4%	EM High Momentum 7%	EM Quality (3%)	EM Small Cap 1%	EM Value (3%)	EM Value (11%)	EM High Momentum (7%)	EM Value 10%	EM Low Volatility 4%
EM Quality (22%)	MSCI EM 18%	EM Small Cap 12%	EM Low Momentum 22%	EM Low Volatility 4%	EM Value 6%	EM Low Volatility (5%)	EM High Momentum 0%	EM Low Volatility (4%)	EM Large Cap (11%)	EM Quality (7%)	MSCI EM 10%	EM Large Cap 4%
EM Large Cap (22%)	EM Low Momentum 18%	EM Quality 11%	EM Large Cap 20%	EM Low Momentum 3%	EM Quality 5%	EM Value (5%)	EM Low Volatility 0%	EM Small Cap (4%)	MSCI EM (11%)	EM Low Volatility (10%)	EM Growth 10%	EM Growth 4%
EM Low Volatility (24%)	EM High Momentum 18%	EM Large Cap 10%	MSCI EM 20%	EM Quality 2%	MSCI EM 5%	EM High Momentum (6%)	EM Value (0%)	MSCI EM (7%)	EM Low Volatility (12%)	EM Value (11%)	EM Large Cap 9%	MSCI EM 4%
MSCI EM (24%)	EM Large Cap 17%	MSCI EM 10%	EM Low Volatility 18%	MSCI EM 2%	EM Growth 4%	MSCI EM (8%)	MSCI EM (1%)	EM Quality (7%)	EM Growth (12%)	MSCI EM (11%)	EM Small Cap 8%	EM Value 4%
EM Value (28%)	EM Quality 17%	EM Low Volatility 7%	EM High Momentum 18%	EM Large Cap 2%	EM Low Volatility 4%	EM Large Cap (9%)	EM Large Cap (1%)	EM Large Cap (7%)	EM High Momentum (15%)	EM Large Cap (12%)	EM Low Volatility 8%	EM Small Cap 4%
EM Low Momentum (30%)	EM Low Volatility 15%	EM Value 5%	EM Quality 18%	EM High Momentum 2%	EM Large Cap 4%	EM Low Momentum (9%)	EM Low Momentum (2%)	EM Low Momentum (9%)	EM Quality (15%)	EM Growth (12%)	EM Quality 6%	EM Quality 3%
EM Small Cap (31%)	EM Value 14%	EM Low Momentum 2%	EM Growth 17%	EM Growth 1%	EM Low Momentum 3%	EM Growth (11%)	EM Growth (2%)	EM Growth (10%)	EM Small Cap (16%)	EM Low Momentum (18%)	EM High Momentum 2%	EM High Momentum 0%

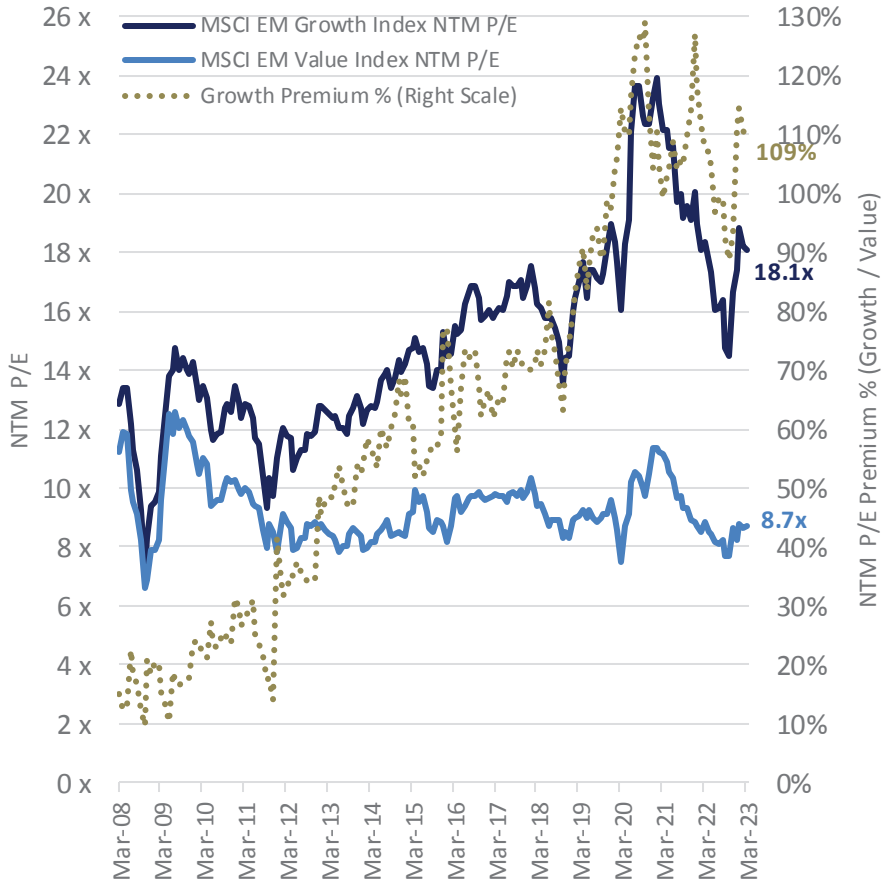
Note: "MSCI Emerging Markets" represents MSCI Emerging Markets Index. "Emerging Markets Value" and "Emerging Markets Growth" represent the MSCI Emerging Markets Value Index and the MSCI Emerging Markets Growth Index, respectively. "Emerging Markets Small Cap" and "Emerging Markets Large Cap" represent the MSCI Emerging Markets Small Cap Index and the MSCI Emerging Markets Large Cap Index, respectively. "Emerging Markets Quality" and "Emerging Markets Low Volatility" represent the MSCI Emerging Markets Quality Index and MSCI Emerging Markets Volatility Tilt Index, respectively. "Emerging Markets High Momentum" and "Emerging Markets Low Momentum" represent the geometrically linked float-weighted monthly returns of the top and bottom halves, respectively, of price performers in the MSCI Emerging Markets Index over the previous 12 months. Source: Factset, MSCI, Russell Investment Indices

How Expensive are Emerging Markets Growth Stocks?

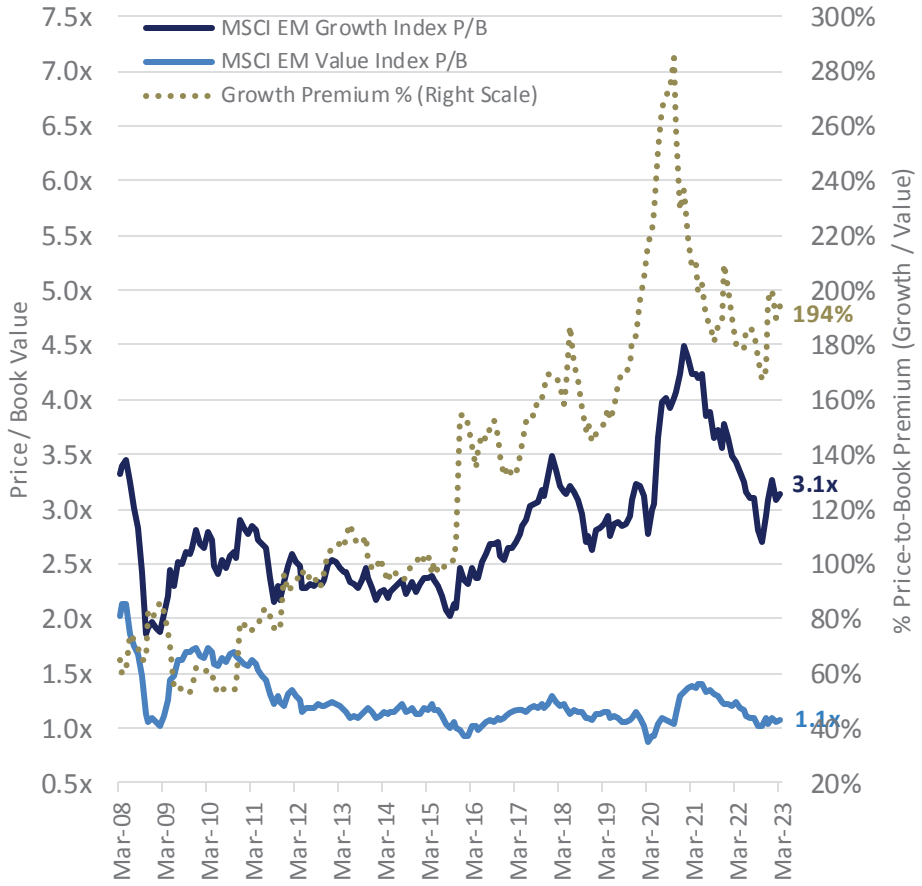
EM Growth Stocks Trade at a Significant Premium to Value Stocks

Last 15 Years (March 2008 – March 2023)

Forward P/E



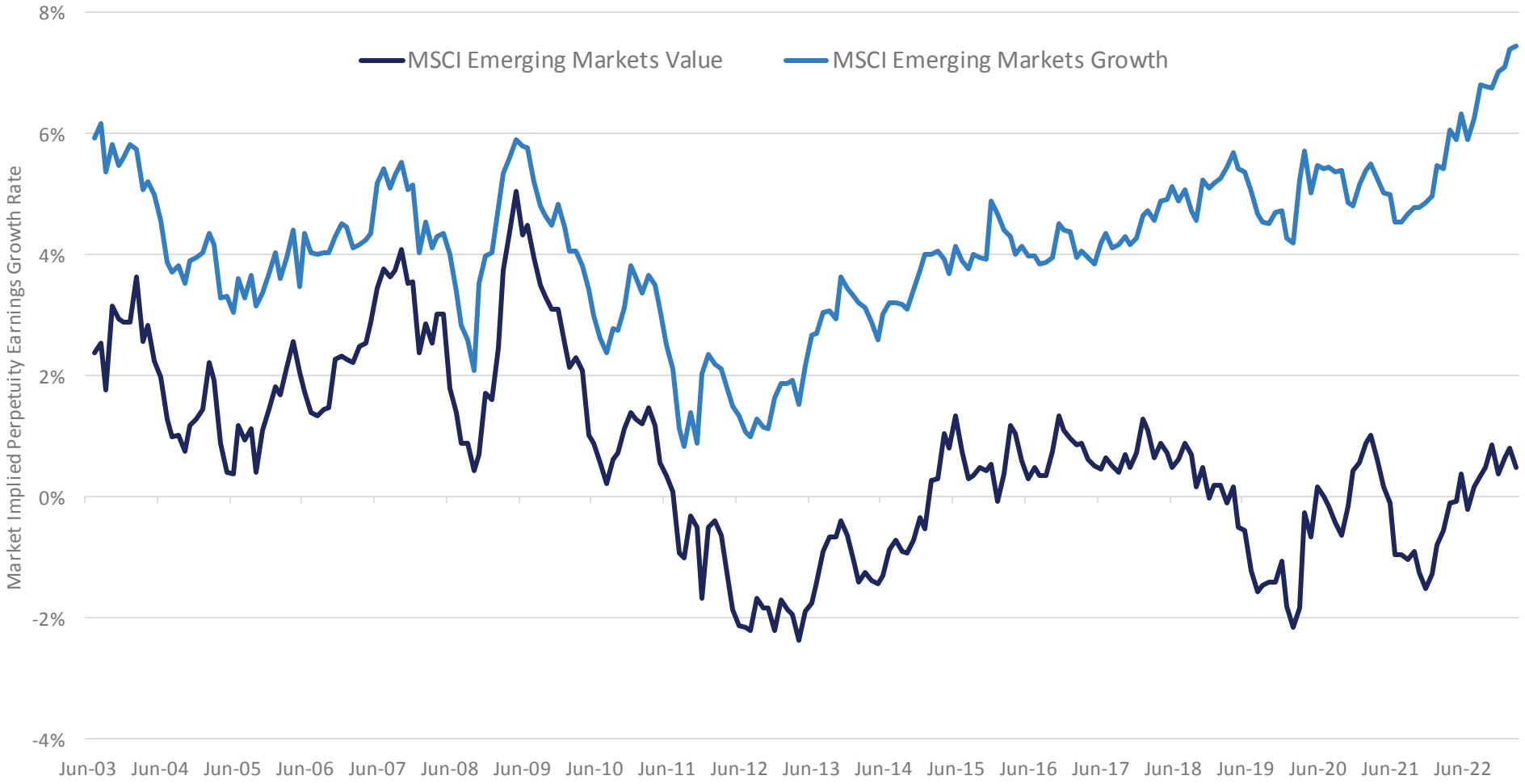
Price / Book Value



Note: The "Forward P/E" of a stock is its price divided by the consensus EPS estimate for the next twelve months. The "Price / Book Value" of a stock is its price divided by the most recent shareholders' equity per share. "Growth Premium %" is the forward P/E ratio (or Price / Book Value ratio) of the MSCI Emerging Markets Growth Index divided by the forward P/E ratio (or Price / Book Value ratio) of the MSCI Emerging Markets Value Index, less 100%. Source: Factset, MSCI

The Market is Currently Implying Low Perpetuity Growth for EM Value Stocks

June 2003 – March 2023



Note: Gordon Growth Model framework assuming all earnings are paid as dividends. NTM P/E multiples from MSCI. Fixed 5% equity risk premium and respective 36-month betas to the MSCI Emerging Markets Index are used to calculate cost of equity. Risk-free rates determined as follows: Emerging markets rates represent the 10-year U.S. Treasury Yield plus the Emerging Market Bond Index (EMBI) spread. Monthly data from June 2003 (beginning of MSCI NTM P/E multiple data). See "Disclosures" for further information. Source: FactSet, Bloomberg, MSCI, Causeway Analytics.

How do Emerging Markets (EM) Managers handle changing economic style regimes?

Analysis from April 2007 – March 2023

Batting Average

	Causeway EM		Portfolio B		Portfolio C		Portfolio D	
	Batting Average		Batting Average		Batting Average		Batting Average	
	Up Months	Down Months	Up Months	Down Months	Up Months	Down Months	Up Months	Down Months
MSCI EM Value	51.7%	54.4%	61.8%	47.6%	44.9%	57.3%	46.1%	56.3%
MSCI EM Growth	54.4%	51.7%	47.6%	61.8%	57.3%	44.9%	56.3%	46.1%
MSCI EM Large	46.9%	59.6%	28.6%	80.9%	53.1%	50.0%	49.0%	54.3%
MSCI EM Small	55.6%	50.5%	72.7%	34.4%	54.5%	48.4%	49.5%	53.8%
MSCI EM Quality	53.9%	52.2%	65.7%	41.1%	56.9%	45.6%	54.9%	47.8%
MSCI EM Min Vol	51.0%	55.4%	63.0%	44.6%	57.0%	45.7%	55.0%	47.8%
Yield Curve (US 10Y-2Y)	53.8%	52.5%	48.4%	59.4%	57.1%	46.5%	49.5%	53.5%
US Dollar (DXY)	49.5%	57.0%	53.5%	54.8%	52.5%	50.5%	54.5%	48.4%

**% of Months of Positive Active Return in Up and Down Mkts. Green data is favorable and indicates a batting avg of 50% or higher, red data is unfavorable and indicates a batting avg of less than 50%.*

Median Excess Monthly Return

	Causeway EM		Portfolio B		Portfolio C		Portfolio D	
	Median Return		Median Return		Median Return		Median Return	
	Up Months	Down Months	Up Months	Down Months	Up Months	Down Months	Up Months	Down Months
MSCI EM Value	0.08%	0.06%	0.36%	(0.10%)	(0.21%)	0.23%	(0.23%)	0.36%
MSCI EM Growth	0.06%	0.08%	(0.10%)	0.36%	0.23%	(0.21%)	0.36%	(0.23%)
MSCI EM Large	(0.03%)	0.21%	(0.41%)	0.53%	0.07%	0.01%	(0.02%)	0.09%
MSCI EM Small	0.15%	0.01%	0.42%	(0.22%)	0.17%	(0.05%)	(0.04%)	0.25%
MSCI EM Quality	0.14%	0.03%	0.20%	(0.18%)	0.31%	(0.21%)	0.13%	(0.04%)
MSCI EM Min Vol	0.04%	0.07%	0.20%	(0.15%)	0.25%	(0.19%)	0.17%	(0.04%)
Yield Curve (US 10Y-2Y)	0.08%	0.06%	(0.08%)	0.19%	0.23%	(0.09%)	(0.04%)	0.13%
US Dollar (DXY)	(0.01%)	0.18%	0.08%	0.11%	0.08%	0.03%	0.17%	(0.04%)

**Median Active Return - Green data is profitable, red data is unprofitable*

Portfolios B, C, and D reflect the three largest actively managed funds in the relevant Lipper category as of the end of the last quarter that are not ETFs, index products, or fund-of-funds, which invest less than 10% in developed markets and have operated since or earlier than the inception date of Causeway Emerging Markets Fund. Past performance is not a guarantee of future results. See also "Disclosures." Source: FactSet/SPAR

Causeway Risk Lens

Compares Risk Forecasts Across Multiple Portfolios Using Current Holdings

Generated on 4/6/2023 based on most recent publicly available portfolio holdings

Active Style Exposures	Causeway EM	Portfolio B	Portfolio C	Portfolio D
STYLE-Value	0.80	0.31	-0.33	-0.48
STYLE-LT Growth	0.13	-0.15	0.02	0.14
STYLE-Momentum	0.13	0.06	0.11	0.00
STYLE-Leverage	0.15	0.08	-0.12	-0.33
STYLE-Liquidity	0.12	0.10	-0.04	0.00
STYLE-Size	-0.31	-0.62	0.01	0.21
STYLE-Volatility	0.06	-0.05	0.21	0.15
STYLE-Cyclicality	0.15	0.02	0.14	0.05

PREDICTED ACTIVE RETURN CORRELATION - PROPRIETARY TO RISK LENS

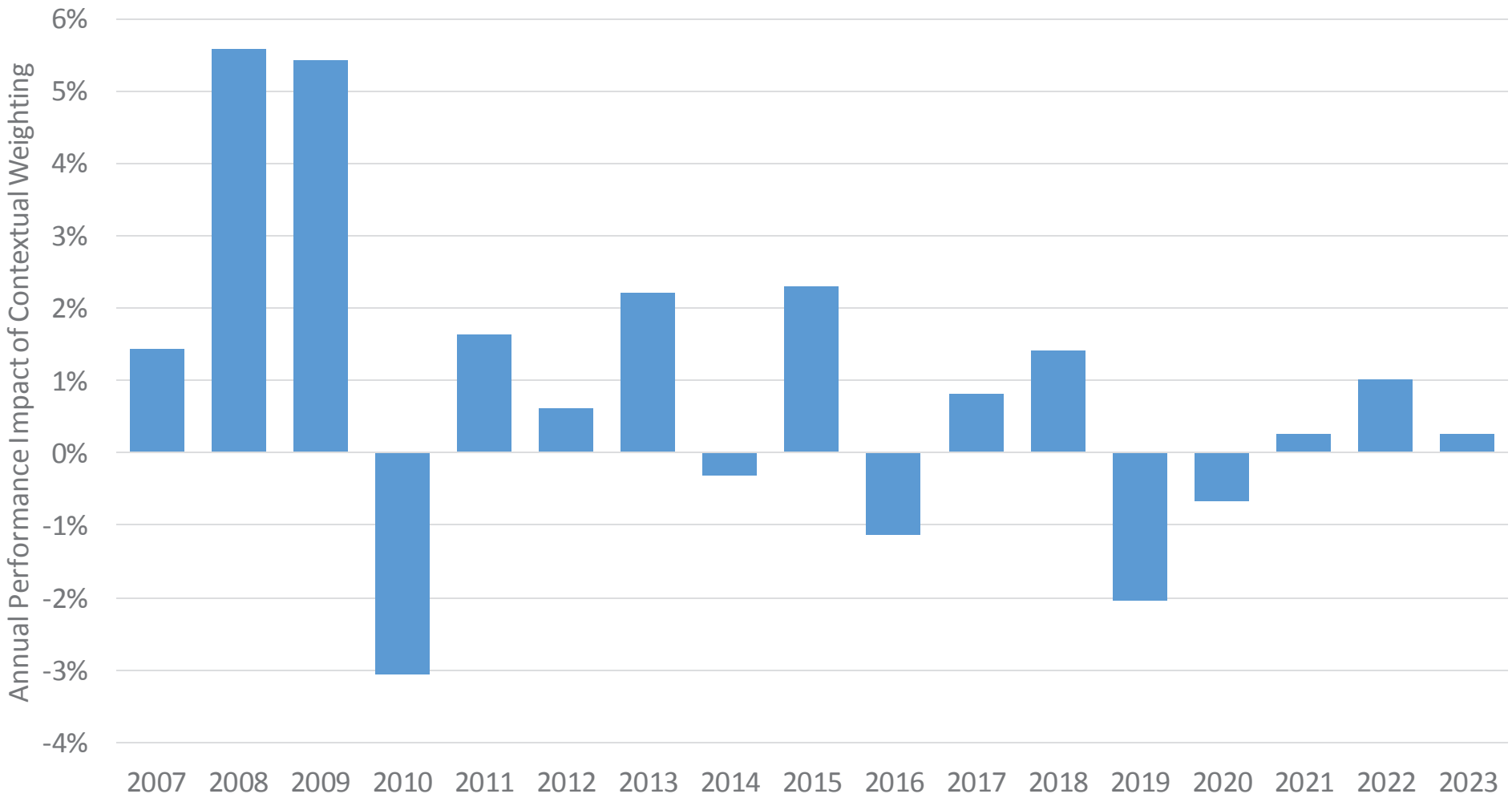
	Causeway EM	Portfolio B	Portfolio C	Portfolio D
Causeway EM				
Portfolio B	0.47			
Portfolio C	-0.21	-0.12		
Portfolio D	-0.28	-0.22	0.46	

See "Disclosures." Risk Lens is an analytics tool that shows active style, sector and geographic exposures for stock funds. It shows top risk exposures and stock weights. It shows forecast risk measures and predicts fund return correlations. Visit https://analytics.causewaycap.com/#risklens for free analysis covering over 9,000 U.S.-registered stock mutual funds and ETFs across all major geographies.

Know Your Portfolio – Use Risk Lens

Contextual Weighting Has Added Value Since Inception

ON AVERAGE, CONTEXTUAL WEIGHTING HAS ADDED 1.0% TO PERFORMANCE ANNUALLY

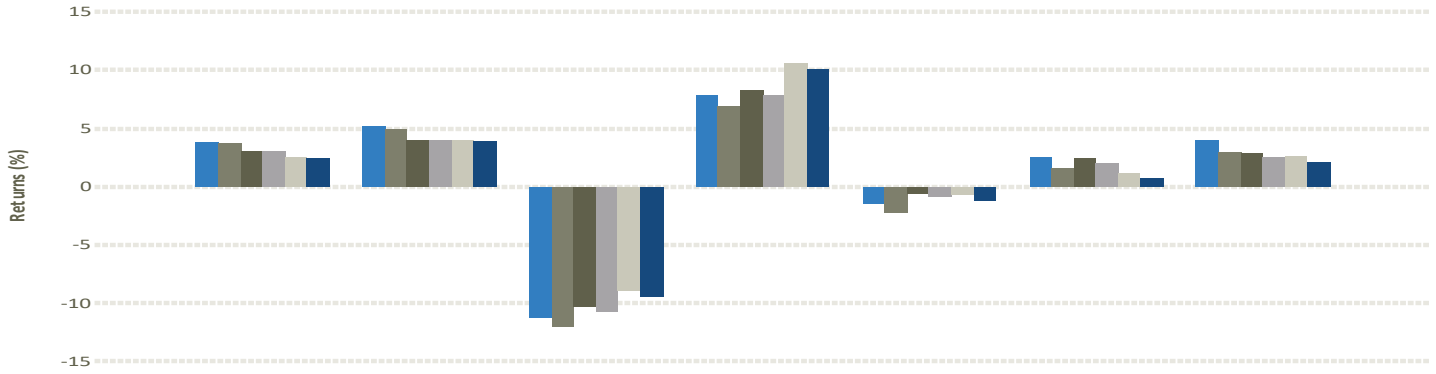


Source: Causeway Analytics. Analysis compares the performance of a portfolio that contextually weights Causeway's bottom-up EM alpha contexts versus equally-weighting them. Causeway's bottom-up EM alpha contexts are alpha models that differentially weight Causeway bottom-up EM alpha factors – value, earnings growth, and momentum. There are six different alpha contexts – high value, low value, high growth, low growth, high momentum, and low momentum. They each assign different weights to value, earnings growth, and momentum. The value-add of our contextual process is then assessed by comparing the long-short (Q1-Q5) performance of our actual Causeway bottom-up contextual alpha versus that of a model that assigns an equal weight to each of the six contexts for every stock. All portfolios are rebalanced monthly. All returns are gross of fees and transactions costs.

Investment Adviser Information

Performance

COMPOSITE PERFORMANCE *for the periods ended March 31, 2023*



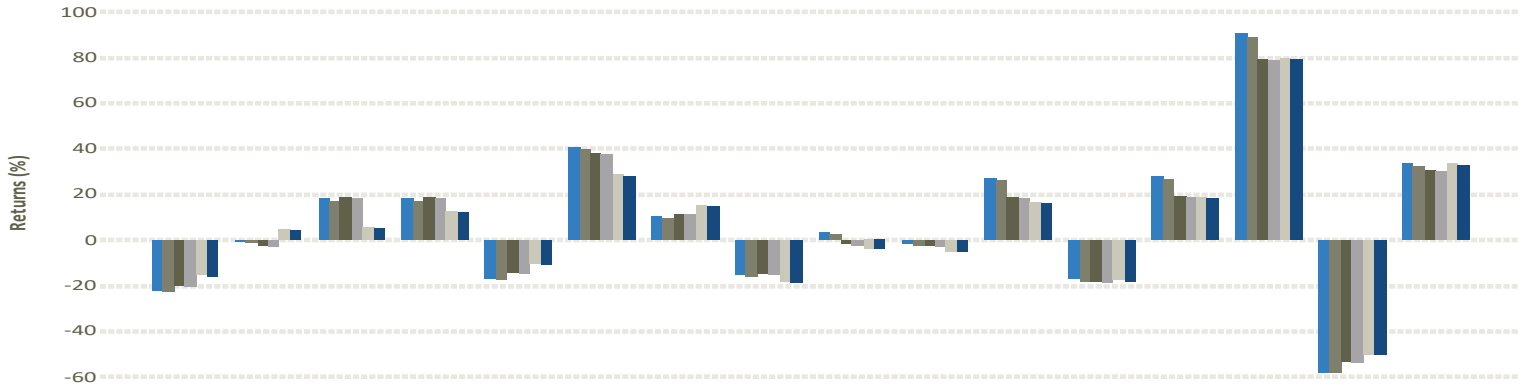
	Month	Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception
Emerging Markets (Gross)	3.79	5.15	-11.22	7.85	-1.42	2.50	3.99
Emerging Markets (Net)	3.72	4.92	-11.99	6.91	-2.30	1.55	3.00
MSCI Emerging Markets (Gross)	3.07	4.02	-10.30	8.23	-0.53	2.37	2.89
MSCI Emerging Markets (Net)	3.03	3.96	-10.70	7.83	-0.91	2.00	2.54
MSCI Emerging Markets Value (Gross)	2.50	3.98	-8.87	10.63	-0.64	1.20	2.58
MSCI Emerging Markets Value (Net)	2.45	3.91	-9.44	10.04	-1.15	0.69	2.12

Inception Date: 04/30/2007

Returns are in USD. Index returns are presented gross or net of tax withholdings on income and dividends. The gross composite performance presented is before management and custody fees but after trading expenses. Net composite performance is presented after the deduction of actual management fees, performance-based fees, and all trading expenses, but before custody fees. Composite performance is primarily net of foreign dividend withholdings. Annualized for periods greater than one year. See end of presentation for important disclosures regarding the composite. This information supplements the attached composite presentation. Composite returns are "Gross" or "Net" of advisory fees and, in each case, primarily net of foreign dividend withholdings. Performance quoted is past performance. Past performance is not an indication of future results.

Calendar Year Performance

COMPOSITE PERFORMANCE



	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Emerging Markets (Gross)	-21.76	-0.30	18.14	18.13	-16.77	41.08	10.49	-15.13	3.45	-1.31	27.48	-16.98	27.97	90.53	-57.82	33.20
Emerging Markets (Net)	-22.48	-1.18	17.09	17.07	-17.54	39.78	9.45	-15.97	2.43	-2.34	26.21	-17.85	26.70	88.69	-58.23	32.27
MSCI Emerging Markets (Gross)	-19.74	-2.22	18.69	18.88	-14.25	37.75	11.60	-14.60	-1.82	-2.27	18.63	-18.17	19.20	79.02	-53.18	30.39
MSCI Emerging Markets (Net)	-20.09	-2.54	18.31	18.42	-14.58	37.28	11.19	-14.92	-2.19	-2.60	18.22	-18.42	18.88	78.51	-53.33	30.16
MSCI Emerging Markets Value (Gross)	-15.31	4.50	5.97	12.52	-10.26	28.67	15.48	-18.16	-3.60	-4.70	16.38	-17.57	18.80	79.70	-50.08	33.46
MSCI Emerging Markets Value (Net)	-15.83	4.00	5.48	11.94	-10.72	28.07	14.90	-18.57	-4.08	-5.11	15.87	-17.86	18.41	79.11	-50.27	33.15

Inception Date: 04/30/2007

Partial period return for calendar year 2007 (April 30, 2007 to December 31, 2007).

Returns are in USD. Index returns are presented gross or net of tax withholdings on income and dividends. The gross composite performance presented is before management and custody fees but after trading expenses. Net composite performance is presented after the deduction of actual management fees, performance based fees, and all trading expenses, but before custody fees. Composite performance is primarily net of foreign dividend withholdings. See end of presentation for important disclosures regarding the composite. This information supplements the attached composite presentation. Composite returns are "Gross" or "Net" of advisory fees and, in each case, primarily net of foreign dividend withholdings. Performance quoted is past performance. Past performance is not an indication of future results.

Important Disclosures

CAUSEWAY CAPITAL MANAGEMENT LLC

Emerging Markets Equity Composite

SCHEDULE OF INVESTMENT PERFORMANCE RESULTS

FOR THE PERIOD FROM April 30, 2007 (Inception) THROUGH December 31, 2021

COMPOSITE INCEPTION DATE: April 2007 COMPOSITE CREATION DATE: April 2007

Year	Gross-of-Fees Return (%)	Net-of-Fees Return (%)	Benchmark* Return (%) [a]	Number of Portfolios In Composite at end of Period	Composite Dispersion (%)	Composite 3-Yr St Dev (%)	Benchmark* 3-Yr St Dev (%) [a]	Composite Assets at end of Period ($ millions)	Total Firm Assets at end of Period ($ millions)	Total Advisory-Only Firm Assets at End of Period ($ millions)
2007 [c]	33.20	32.27	30.39	1	N/M	N/A [b]	N/A	30.75	17,599.18	N/A
2008	(57.82)	(58.23)	(53.18)	1	N/M	N/A [b]	N/A	21.96	8,407.24	237.88
2009	90.53	88.69	79.02	1	N/M	N/A [b]	N/A	26.59	9,783.34	408.74
2010	27.97	26.70	19.20	1	N/M	35.59	32.59	38.03	11,690.18	497.39
2011	(16.98)	(17.85)	(18.17)	1	N/M	27.30	25.76	117.80	10,966.08	710.15
2012	27.48	26.21	18.63	1	N/M	22.28	21.49	160.09	15,242.40	947.58
2013	(1.31)	(2.34)	(2.27)	2	N/M	19.79	19.03	538.99	25,749.58	2,038.22
2014	3.45	2.43	(1.82)	3	N/M	15.62	14.99	1,175.27	33,630.22	3,436.32
2015	(15.13)	(15.97)	(14.60)	3	N/M	14.30	14.04	2,188.19	38,585.19	2,630.69
2016	10.49	9.45	11.60	5	N/M	15.74	16.07	3,571.89	41,731.32	2,322.17
2017	41.08	39.78	37.75	6	N/M	15.46	15.36	5,934.50	55,606.75	3,065.72
2018	(16.77)	(17.54)	(14.24)	7	0.49	15.00	14.62	5,375.03	48,462.26	2,723.16
2019	18.13	17.07	18.88	7	0.24	14.70	14.17	5,639.02	49,889.09	2,958.84
2020	18.14	17.09	18.69	8	0.56	19.24	19.62	5,268.82	42,093.18	3,073.49
2021	(0.30)	(1.18)	(2.22)	7	0.36	17.74	18.35	3,407.24	41,024.68	3,896.93

N/M - Not considered meaningful for 5 portfolios or less for the full year.

a - Not covered by the report of independent accountants.

b - 36 monthly returns are not available.

c - Partial period (April 30, 2007 - December 31, 2007). In January 2016, the benchmark return was revised from 30.51% to 30.39%.

**MSCI Emerging Markets Index*

Disclosures

For Investment Professional Use Only - Investor Distribution Prohibited.

Causeway returns are based on a representative account using the Causeway Emerging Markets strategy. Representative account inception is 3/30/07. Source: Morningstar U.S. Open End Diversified Emerging Markets category. Analyzing portfolios with different objectives, risk and return characteristics, and categories may highlight differences that should not be relied upon. The performance data quoted herein represents past performance. Past performance is not a guarantee of future results. Total returns assume reinvestment of dividends and capital gains distributions at net asset value when paid.

"Up Months" means a month when the MSCI or Russell style index outperformed the benchmark MSCI Emerging Markets Index ("EM Index"), and "Down Months" means a month when the style index underperformed the EM Index. "Batting average" measures an investment manager's ability to meet or beat an index. Batting average is calculated by dividing the number of months in which the manager beats or matches the EM Index by the total number of months in the period and multiplying that factor by 100. "Correlation" ranges between -1 and +1. Perfect positive correlation (+1) implies that as the index moves up or down, the strategy will move in the same direction. Perfect negative correlation (-1) means the strategy will move in the opposite direction. A correlation of 0 means the index and strategy have no correlation. "Excess Return" is performance in excess of the EM Index.

In addition to the normal risks associated with equity investing, international investing may involve risk of capital loss from unfavorable fluctuations in currency values, from differences in generally accepted accounting principles, or from economic or political instability in other nations. Emerging markets involve heightened risks related to the same factors, as well as increased volatility and lower trading volume. Current and future holdings are subject to risk.
Causeway Risk Lens is an investment analysis tool provided at an investor's request and is for illustration only. It is not intended to be relied on for investment advice. Important disclosures accompany the Causeway Risk Lens, and should be reviewed carefully. In particular, the projections or other information generated by Causeway Risk Lens investment analysis tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Portfolios B, C, and D reflect the three largest actively managed funds in the relevant Lipper category as of the end of the last quarter that are not ETFs, index products, or fund-of-funds, which invest less than 10% in developed markets and have operated since or earlier than the inception date of Causeway Emerging Markets Fund. Past performance is not a guarantee of future results.

The MSCI Emerging Markets ("EM") Index is a free float-adjusted market capitalization index, designed to measure equity market performance of emerging markets, consisting of 26 emerging country indices. The MSCI USA Value Index captures large and mid-cap U.S. securities exhibiting overall value style characteristics. The MSCI USA Growth Index captures large and mid-cap securities exhibiting overall growth style characteristics in the U.S. The MSCI EM Value and Growth Indices capture large and mid cap securities exhibiting overall value or growth style characteristics. Value investment style characteristics are defined using book value to price, 12-month forward earnings to price and dividend yield, and growth investment style characteristics are defined using long-term forward earnings per share growth rate, short-term forward earnings per share growth rate, current internal growth rate and long-term historical earnings per share growth trend and long-term historical sales per share growth trend. The MSCI EM Large and Small Cap Indices include large-cap and small-cap representation, covering approximately 70% and 14%, respectively, of the free float-adjusted market capitalization in each country. The Indices are gross of withholding taxes, assume reinvestment of dividends and capital gains, and assume no management, custody, transaction or other expenses. The Russell Stability Index Series is designed to be a comprehensive representation of the investable global defensive and dynamic equity markets. Defensive and Dynamic indexes are created by splitting an existing applicable Russell index in half based on the combination of the stability indicators. The Russell Defensive Indexes measure the performance of companies that have relatively stable business conditions which are less sensitive to economic cycles, credit cycles and market volatility based on their stability indicators. The Russell Dynamic Indexes measure the performance of companies that have relatively less stable business conditions and are more sensitive to those market cycles. It is not possible to invest directly in these indices.

This presentation expresses the authors' views as of March 31, 2023 and should not be relied on as research or investment advice. These views and any portfolio characteristics are subject to change. MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as a basis for other indices or investment products. For further information on the risks regarding investing in Causeway's strategies, please go to https://www.causewaycap.com/wp-content/uploads/Risk-Disclosures.pdf

Important Disclosures

Causeway Capital Management LLC (Causeway) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Causeway has been independently verified for the periods June 11, 2001 through December 31, 2021.

A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The Emerging Markets Equity Composite (EM Composite) has had a performance examination for the periods April 30, 2007 through December 31, 2021. The verification and performance examination reports are available upon request.

GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

The Firm, Causeway, is organized as a Delaware limited liability company and began operations in June 2001. It is registered as an investment adviser with the U.S. Securities and Exchange Commission under the Investment Advisers Act of 1940. Registration does not imply a certain level of skill or training. Causeway manages international, global, and emerging markets equity assets for institutional clients including corporations, pension plans, sovereign wealth funds, superannuation funds, public retirement plans, Taft-Hartley pension plans, endowments and foundations, mutual funds and other collective investment vehicles, charities, private trusts and funds, wrap fee programs, and other institutions. The firm includes all discretionary and non-discretionary accounts managed by Causeway.

The EM Composite includes all U.S. dollar denominated, discretionary accounts in the emerging markets equity strategy that are not constrained by socially responsible investment restrictions. The emerging markets equity strategy seeks long-term growth of capital through investment primarily in equity securities of companies in emerging markets using a quantitative investment approach. New accounts are included in the EM Composite after the first full month under management. Terminated accounts are included in the EM Composite through the last full month under management. A complete list and description of Firm composites is available upon request.

Account returns are calculated daily. Monthly account returns are calculated by geometrically linking the daily returns. The return of the EM Composite is calculated monthly by weighting monthly account returns by the beginning market values. Valuations and returns are computed and stated in U.S. dollars. Returns include the reinvestment of interest, dividends and any capital gains. Returns are calculated gross of withholding taxes on dividends, interest income, and capital gains, except returns of Causeway Emerging Markets Fund are net of such withholding taxes and reflect accrued tax treaty reclaims. The firm's policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. Past performance is no guarantee of future performance. Composite dispersion, if applicable, is calculated using the equal-weighted standard deviation of all portfolios that were included in the EM Composite for the entire year. The three-year annualized ex-post standard deviation quantifies the variability of the composite or benchmark returns over the preceding 36-month period.

The EM Composite's benchmark is the MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index, designed to measure equity market performance in the global emerging markets, consisting of 24 emerging country indices. The Index is gross of withholding taxes, assumes reinvestment of dividends and capital gains, and assumes no management, custody, transaction or other expenses. Accounts in the EM Composite may invest in countries not included in the Index, and may use different benchmarks.

Gross-of-fee returns are presented before management and custody fees but after trading expenses. Net-of-fee returns are presented after the deduction of actual management fees, performance-based fees, and all trading expenses, but before custody fees. Causeway's basic management fee schedules are described in its Firm brochure pursuant to Part 2 of Form ADV. The basic separate account annual fee schedule for emerging markets equity assets under management is: 0.75% of the first $200 million and 0.60% thereafter. The highest expense ratio and the highest all-in fee for a series of a private commingled vehicle, which is included in the EM Composite, is 0.75%. The fee schedule for the private commingled vehicle is an all-in fee, which covers normal operating fees and expenses of the private commingled vehicle, and the management fee paid to Causeway as the investment manager. Accounts in the EM Composite may have different fee schedules or pay bundled fees. Bundled fees include management, custody, and fund accounting fees.

MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations, and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as a basis for other indices or investment products.

For further information on the risks regarding investing in Causeway's strategies, please go to https://www.causewaycap.com/wp-content/uploads/Risk-Disclosures.pdf

Biographies

Taylor Alan-Lee, CFA, Relationship Manager

Mr. Alan-Lee is a client service relationship manager at Causeway. He joined the firm in January 2018 and his responsibilities include servicing institutional clients in the United States and Canada. Mr. Alan-Lee also works closely with the portfolio management team to develop client communications and investment content. Prior to joining Causeway, Mr. Alan-Lee was a vice president account manager at PIMCO, responsible for servicing institutional client relationships. Mr. Alan-Lee began his career in the financial services industry in 2008 as an analyst in PIMCO's account management group. Mr. Alan-Lee earned a BA in economics from Dartmouth College and an MBA from The Wharton School at the University of Pennsylvania. Mr. Alan-Lee is a CFA charterholder.

Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
Report From Money Manager - Richmond Capital

Attachments

Report From Money Manager-Richmond Capital

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:38 PM
Final Approval Date: 05/10/2023

INVESTMENT UPDATE

t o

CITY OF FORT PIERCE
RETIREMENT AND BENEFIT SYSTEM

o n

Thursday, May 18, 2023

b y

Paul H. Lundmark, CFA
Managing Director
Portfolio Manager

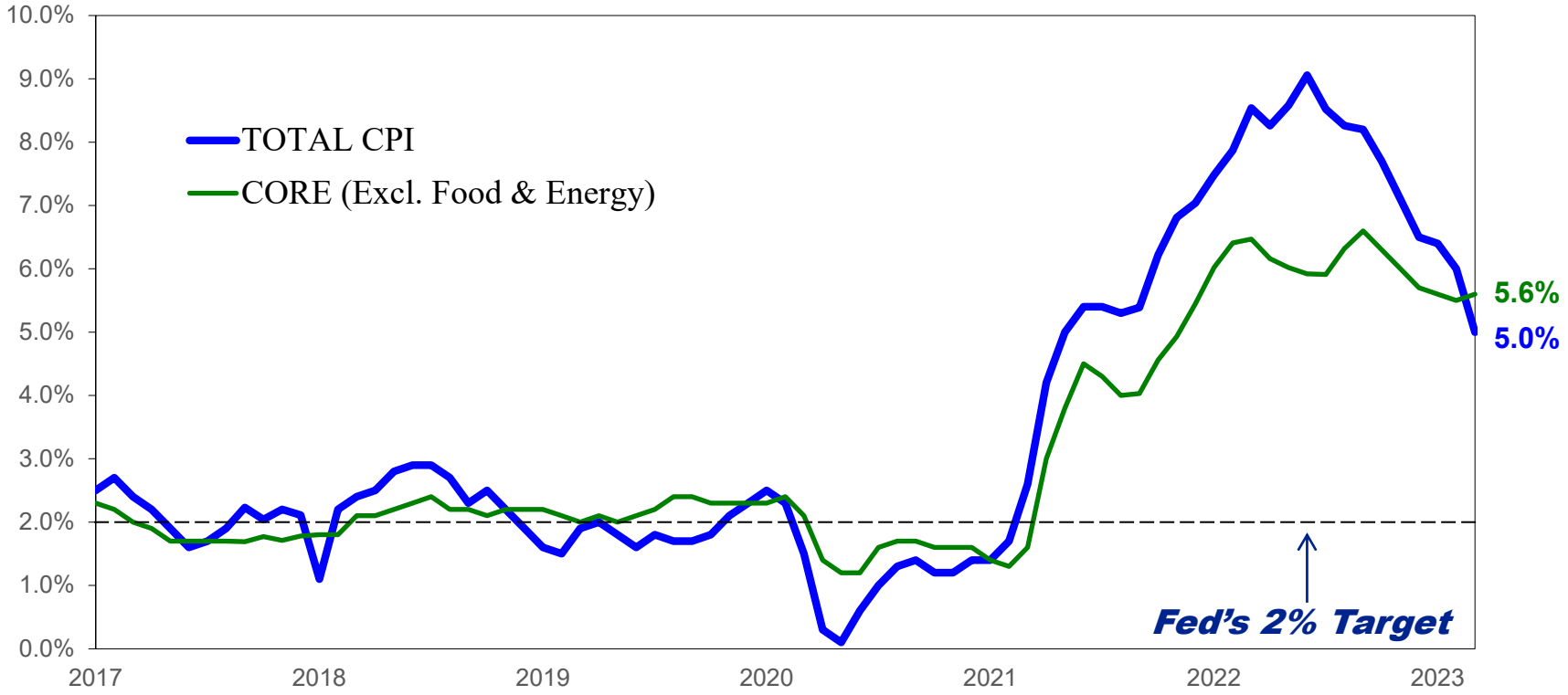


RICHMOND CAPITAL MANAGEMENT
Experience, Knowledge, Service

U.S. INFLATION TRENDS

As of March 31, 2023

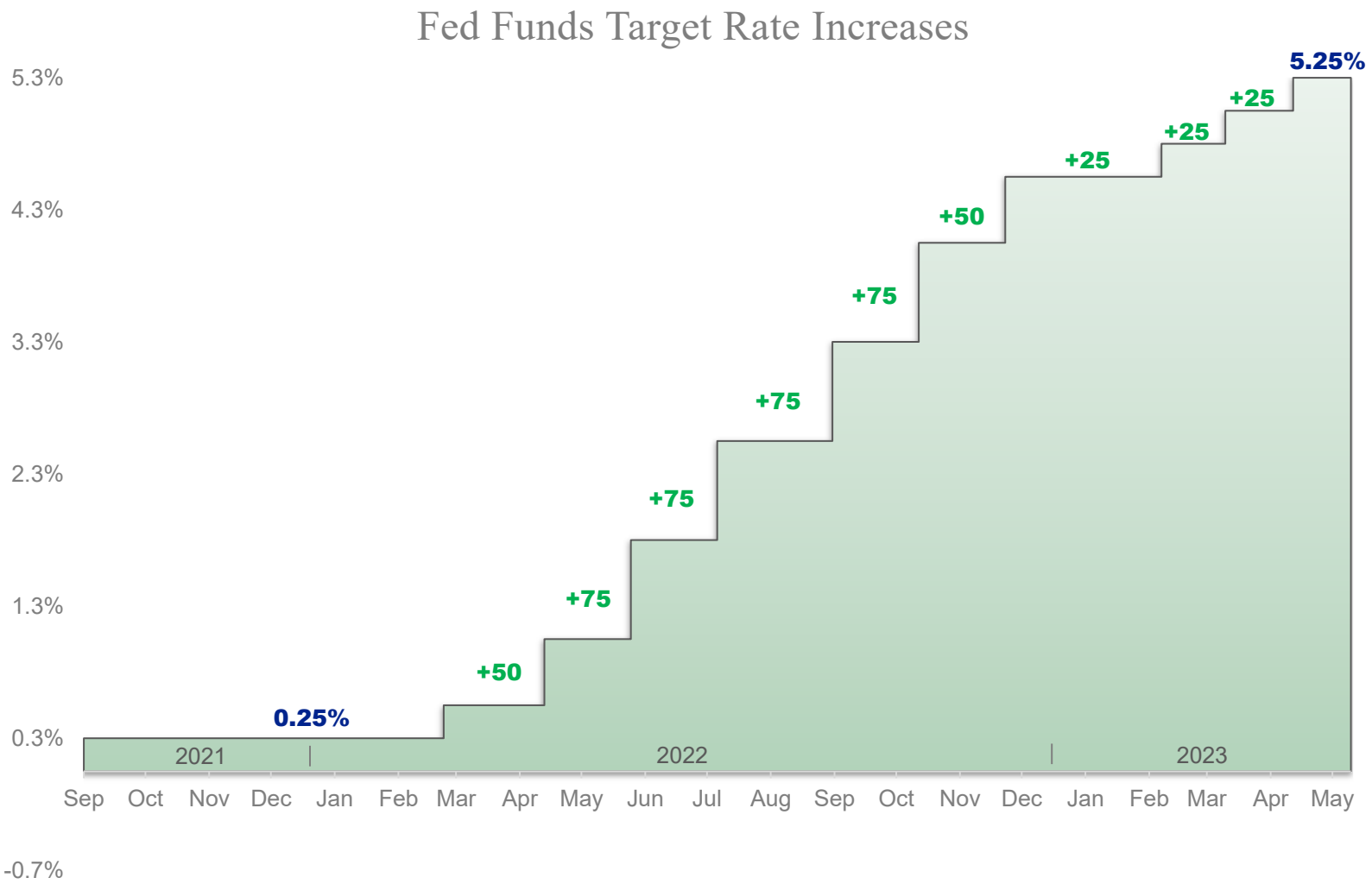
Consumer Price Index (CPI)



Source: Bureau of Labor Statistics; Bloomberg

FEDERAL FUNDS TARGET RATE INCREASES

As of May 3, 2023



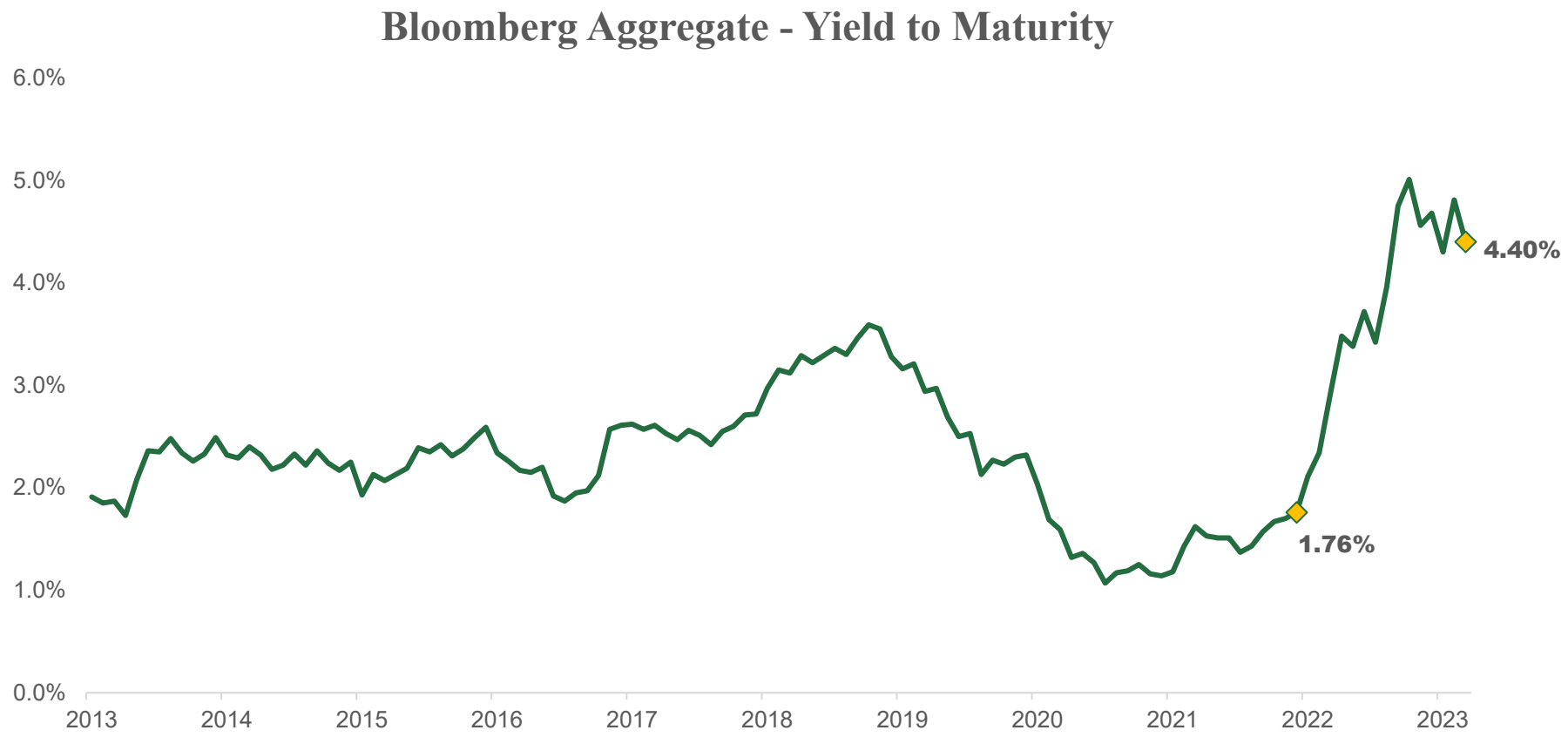
TREASURY YIELD CURVE: HIGHER YIELDS

	3/31/23 Yields (%)	12/31/21 Yields (%)	Change (%)
1 Month	3.63	0.02	+3.61
3 Months	5.12	0.03	+5.09
1 Year	4.80	0.38	+4.42
2 Years	4.27	0.73	+3.54
3 Years	3.97	0.96	+3.01
5 Years	3.73	1.26	+2.47
7 Years	3.67	1.44	+2.23
10 Years	3.60	1.51	+2.09
20 Years	3.92	1.93	+1.99
30 Years	3.80	1.90	+1.90

Source: Bloomberg

BLOOMBERG AGGREGATE INDEX – YIELD TO MATURITY

As of March 31, 2023



CITY OF FORT PIERCE RETIREMENT AND BENEFIT SYSTEM

Portfolio Review

As of March 31, 2023

Cash Flows Since Inception *Through March 31, 2023*	
Market Value *(8/1/1989)*	$12,816,948
Change in Market Value of Holdings	(3,574,308)
Interest Earned	75,685,183
Contributions/ *Withdrawals*	31,758,163 *(63,720,360)*
Total	$52,965,626

Portfolio Review *Through March 31, 2023*	
Average Maturity	8.71 Years
Portfolio Duration *(Bloomberg Aggregate)*	6.31 Years *6.33 Years*
Average Yield to Maturity *(Bloomberg Aggregate)*	4.75% *4.40%*
Average Quality	AA-

Statistics in this report are calculated by Bloomberg PORT Fixed Income Analytic models.

CITY OF FORT PIERCE RETIREMENT AND BENEFIT SYSTEM

Performance Summary

As of March 31, 2023

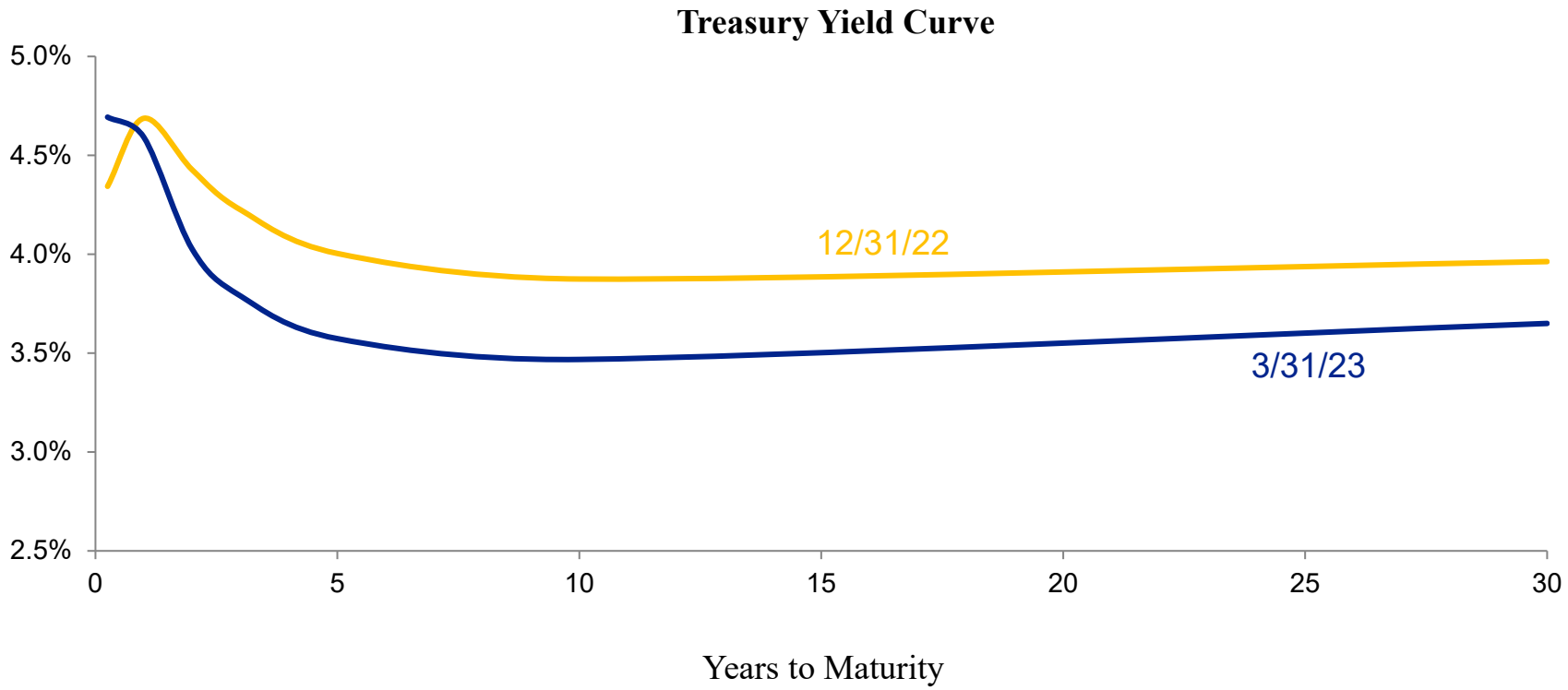
	City of Fort Pierce Retirement and Benefit System	Bloomberg Aggregate Index	Value Added
1st Quarter, 2023	3.11%	2.96%	+0.15%
Fiscal Year to Date	5.24%	4.89%	+0.35%
Annualized: 3 Years	-1.84%	-2.77%	+0.93%
5 Years	1.24%	0.91%	+0.33%
10 Years	1.76%	1.37%	+0.39%
Annualized Since Inception (8/1/1989)	5.72%	5.20%	+0.52%

Bloomberg Govt/Credit 8/1/89 to 5/31/13, Bloomberg Aggregate 6/1/13 forward

Fiscal Year End September 30th

TREASURY YIELD CURVE: INVERTED AND LOWER

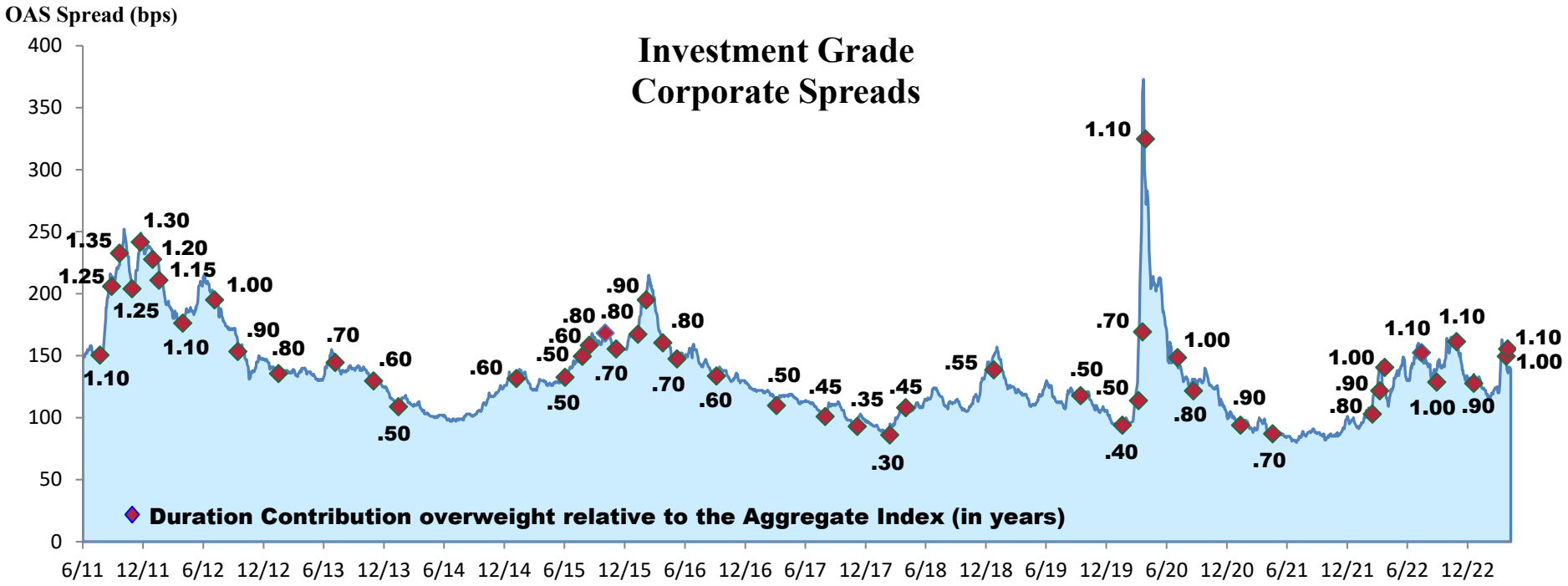
- Inverted yield curve as Federal Reserve still actively tightening.
- Portfolio is equally weighted across the yield curve.
- We are currently neutral duration to the index.



Source: Bloomberg

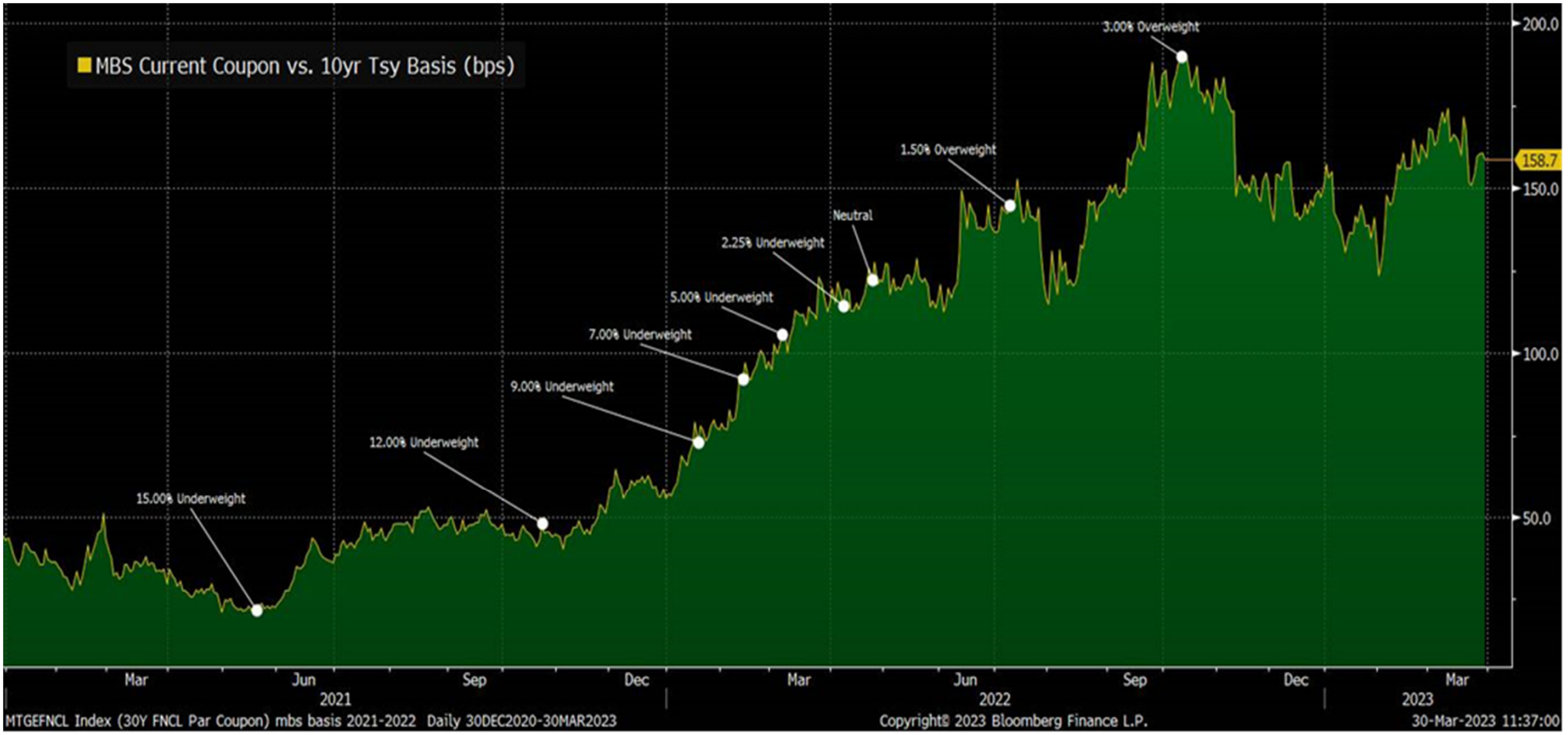
CORPORATE BOND ALLOCATION (DURATION CONTRIBUTION)

- We are disciplined and opportunistic in our approach to overweighting risk in the corporate sector.
- Volatility provided opportunities in 2022 and 2023. When spreads narrowed, we decreased our risk by selling into the enthusiasm and lowering our corporate overweight. As spreads widened and corporates became more attractive, we increased our overweight.



Source: Bloomberg

AGENCY MBS UPDATE

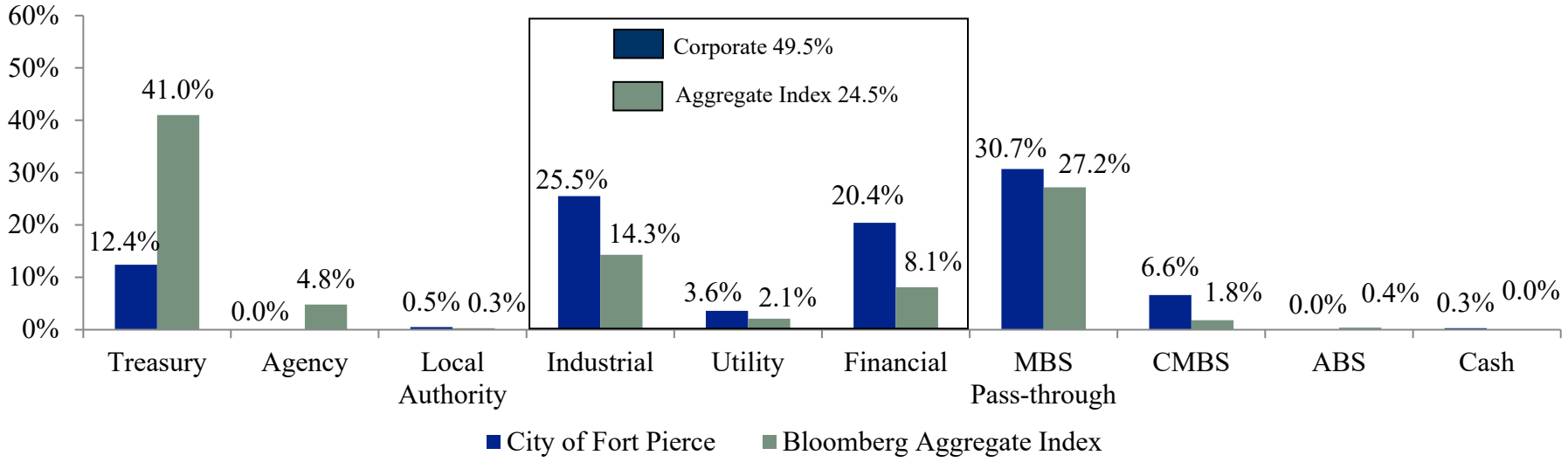


Agency MBS looks very attractive historically versus Treasuries.

CITY OF FORT PIERCE RETIREMENT AND BENEFIT SYSTEM

As of March 31, 2023

Quality Distribution		
	City of Fort Pierce	**Bloomberg Aggregate Index**
AAA	49.8%	72.9%
AA	3.4%	3.1%
A	29.1%	11.2%
BAA	17.7%	12.8%



Statistics in this report are calculated by Bloomberg PORT Fixed Income Analytic models.

RICHMOND CAPITAL STRATEGY SUMMARY FOR 2023

- We believe the investment grade bond market offers opportunity. The yield-to-maturity of your portfolio is the highest it has been since 6/30/2009.

- Volatility in the corporate bond market provided opportunities to add to our corporate exposure in the first quarter of 2023. We purchased Becton Dickinson, Campbell Soup, Capital One, EOG Resources, Kraft Heinz, Phillips 66, Schwab, and US Bancorp at attractive levels.

- We mitigate the risk of all our spread product investments through diversification and a bias to the higher end of the investment grade ratings spectrum. In corporates, we favor A-rated and high BBB-rated companies. All of our mortgage holdings are AAA.

- Lastly, with regard to the overall interest rate sensitivity of our portfolios, we are content to remain neutral duration relative to the benchmark. We think the path of the Federal Reserve rate hikes is still uncertain and other active strategies are much more interesting in 2023. Those strategies include the aforementioned risk/reward attractiveness of "spread" sectors and the security selection opportunities that continue to come our way during these high volatility times.

Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
Report From Money Manager -William Blair

Attachments

Report From Money Manager -William Blair

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:39 PM
Final Approval Date: 05/10/2023

William Blair

May 18, 2023

City of Fort Pierce

International Growth

Emily George
Portfolio Specialist

Cliff Kalish, CFA
Senior Client Relationship Manager

FOR USE WITH INSTITUTIONAL INVESTORS ONLY. As used in this document, "William Blair" refers to William Blair Investment Management, LLC and affiliates unless otherwise noted.

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Overview

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SECTION V
Market Overview/Strategy

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Overview

Photos courtesy of Casey Preyss, Ken McAtamney, Stephanie Braming and Alaina Anderson








The William Blair Mission: Empower. Deliver. Engage.

Empower Colleagues

- Entrepreneurial investment-led culture encourages diverse viewpoints
- Cross-sectional teams answer key questions and drive strategic imperatives
- Mentorship, professional development, generous educational assistance program reinforce intellectual curiosity
- BrightScope® has ranked the William Blair 401(k) and Profit-Sharing Plan in the top 10-15% of its peer group over the last two years

Engage in Our Communities

- Our colleagues are actively engaged in the community through leadership and volunteer roles
- Firm has a culture of global philanthropy and volunteerism

In 2022:

- Achieved 52% participation in matching gifts program versus 20% benchmark for participation in matching gifts.
- The firm, foundation, and employees supported over 1,300 global nonprofit organizations across 12 countries.

Over 2,500 Hours

Employees volunteered with community partners through work and team-sponsored events and programs.

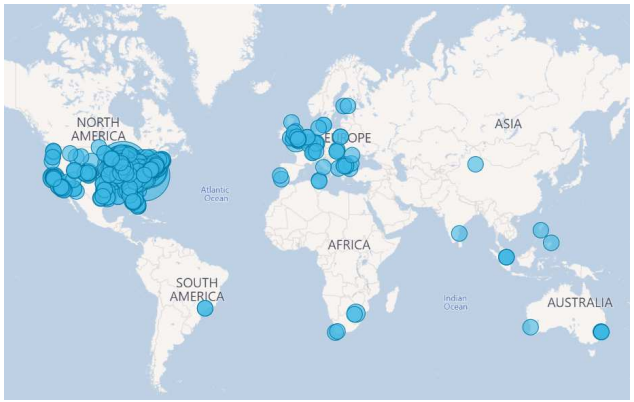
Deliver Client Success

- Private partnership structure aligns interests with clients over the long term
- Demonstrated track record of value-added performance
- Clients engage directly with decision makers, developing customized solutions to meet their unique objectives

Pensions&Investments BEST PLACES TO WORK IN MONEY MANAGEMENT 2022
MULTIYEAR WINNER
2022 ★ 2021 ★ 2020 ★ 2019 ★ 2018
2017 ★ 2016 ★ 2015 ★ 2013 ★ 2012

10 Years Out of the Past 11

2022 Charitable Activity by Geography



Holistic, Investment-led Integration of ESG

Commitment

- William Blair has been a PRI signatory since 2011
- Member of the U.S. Investor Stewardship Group and International Corporate Governance Network; signatory of stewardship codes in UK, Japan, and Korea
- ESG Leadership Team comprises investment professionals across our global equity, U.S. equity, and Emerging Markets Debt teams
- Natural alignment with our quality-focused investment philosophies

Integration

- Investment opportunities and risks holistically incorporate material ESG considerations
- Proprietary framework focuses analysis on most relevant industry- or country-specific factors
- Proprietary Summit research platform facilitates seamless integration and analysis

William Blair ESG Materiality Framework Topic Structure

Environmental

- Climate Change
- Natural Resources Stewardship
- Pollution & Waste

Social

- Human Capital
- Customer Well-Being
- Supply Chain Mgmt.
- Community Relations

Governance

- Corporate Governance
- Corporate Culture

Country ESG Factors

- Political stability and Institutional strength
- Regulatory effectiveness, level of corruption, and rule of law
- Demographic changes, living standards, and income inequality
- Natural resource availability and climate change resilience

Signatory of:

PRI Principles for Responsible Investment

Our full ratings are available on active.williamblair.com.

The inclusion of Environmental, Social and Governance (ESG) factors beyond traditional financial information in the selection of securities could result in a strategy's performance deviating from other strategies or benchmarks, depending on whether such factors are in or out of favor. ESG analysis may rely on certain criteria to eliminate exposures found in similar strategies or benchmarks, which could result in performance deviating.



Diverse Thought Drives Strong Outcomes

Recruiting Strategy

- Diverse candidate and interviewer slates
- Gender-neutral job descriptions
- Always Be Recruiting networking casts a wide net

Industry Outreach

- Purposefully partner with Diverse Professional Organizations for networking, recruiting and to raise awareness
- Collaborate with other industry participants to promote D&I

Internal Initiatives

- Business Resource Groups lead initiatives and support colleagues
- Courageous Conversations engage teams
- Unconscious bias training addresses blind spots
- Mentoring program provides 1x1 networking and feedback

Results

- Diverse leadership teams: IM led by women for over 20 years
- From 12/31/17 to 12/31/22:*
  - 30% of new hires are racially/ethnically diverse (R/ED) and 43.7% are women
  - Women represent 41.4% of IM
  - R/ED talent increased from 15.7% to 22.3%
- Of 8 mutual fund board members, 4 are women and 1 is R/ED
- Received 100% score on the Human Rights Campaign's Corporate Equality Index[1] for the second consecutive year



*As of December 31, 2022. Includes dedicated resource groups. R/ED excludes non-US employees. 169 total hires, 146 US. Mutual fund board members as of November 2021.
[1]Human Rights Campaign's Corporate Equality Index is the national benchmarking survey and report measuring company policies and practices related to LGBTQ workplace equality.

William Blair Investment Management at a Glance

Investment Management

- 100% active-employee owned
- Entrepreneurial, investment-led and client-focused culture
- Long-term expertise across asset classes globally
- Holistic, investment-led ESG integration
- 326 employees (55 partners)
- 103 investment professionals
- $61.5 billion under management

Tenured & Experienced Teams

Average Years of Experience:

Portfolio Managers

24	In the industry	11	At WB

Analysts

17	In the industry	11	At WB

Sophisticated Global Investor Base



Core Investment Tenets

Active Management | Alpha Seeking | Long-Term Focus | Fundamental Orientation | Disciplined Process | Research Intensive

Data as of March 31, 2023.

[1]Wo Bai Business Consulting (Shanghai) Co., Ltd. is an affiliated company solely providing research to other William Blair affiliates on a consultative basis.

[2]In Singapore, this material is provided for your use only by William Blair International (Singapore) Pte. Ltd. (Registration Number 201943312R). William Blair International (Singapore) Pte. Ltd. is regulated by the Monetary Authority of Singapore under a Capital Markets Services License to conduct fund management activities. By accepting this material you represent that you are a non-retail investor and that you will not copy, distribute or otherwise make this material available to any person.

As used on this page, "William Blair" refers to William Blair Investment Management, LLC and affiliates unless otherwise noted. For more information about William Blair, please see http://www.williamblair.com/About-William-Blair.aspx. This material has been distributed for informational purposes only and should not be considered as investment advice or a recommendation of any particular security, strategy, or investment product. Strategy availability may be limited to certain investment vehicles; not all investment vehicles may be available to all investors.

Investment Strategies

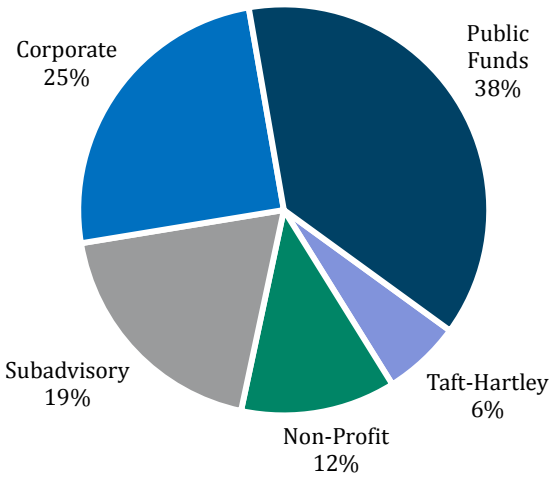
Global reach and wide array of strategies and vehicles

Teams	Strategies		Investment Professionals	AUM
Global Equity	• Global Strategies • International Strategies • Emerging Markets Strategies • China Strategies	• Leaders Strategies • All Cap Strategies • Small Cap Strategies	9 PMs 16 Analysts	**$37.3B**
U.S. Growth & Core Equity	U.S. Growth • All Cap Growth • Large Cap Growth • SMID Growth • Small Cap Growth	U.S. Core • U.S. Equity Sustainability • SMID Core	7 PMs 19 Analysts	**$20.7B**
U.S. Value Equity	• Mid Cap Value • SMID Value • Small Cap Value		3 PMs 5 Analysts	**$3.7B**
Emerging Markets Debt	• Hard Currency • Local Currency • Corporate Debt	• Frontier • Blended	10 PMs 2 Analysts	**$238M**

Assets as of March 31, 2023.
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Sophisticated Investor Base

Balanced mix of institutional clients representing $61.5 billion in assets



Corporate

- Air Products & Chemical, Inc.
- AT&T
- Boeing Company
- Caterpillar Inc.
- Fortune Brands
- Liberty Mutual Insurance
- Major League Baseball Office of the Commissioner
- Pensionskasse SBB (Swiss Federal Railway)
- PGA TOUR, Inc.
- VBV-Pensionskasse AG

Endowment/Foundation

- The College of William and Mary Foundation
- McGill University
- Toledo Museum of Art
- Truth Initiative
- University of California, Irvine Foundation

Healthcare & Not-for-Profit

- Advocate/Aurora Healthcare
- The Carle Foundation
- Clerics of St. Viator
- Intermountain Healthcare
- OhioHealth
- Rush University Medical Center
- SKL Investment Group, LLC

Sub Advisory

- Cazenove Capital
- Charles Schwab
- Columbia Threadneedle Investments
- Fidelity
- GuideStone Capital Management, LLC
- Lombard Odier Darier Hentsch
- Northern Trust
- Prudential
- SEB Group
- UBS

Public Plans & Taft-Hartley

- Alameda County Employees Retirement System
- City of Lansing ERS & PFRS
- City of Orlando Pension Plans
- Colorado Public Employees Retirement Association
- Contra Costa County Employees' Retirement Association
- County Employees' Annuity & Benefit Fund of Cook County
- El Paso Firemen & Policemen's Pension Fund
- Employes' Retirement System of the City of Milwaukee
- Firemen's Annuity & Benefit Fund of Chicago
- Florida State Board of Administration
- Illinois State Board of Investment
- Illinois Municipal Retirement Fund
- Iowa Judiciary
- Laborers' Annuity & Benefit Fund of Chicago
- Municipal Employees' Annuity & Benefit Fund of Chicago
- Municipal Police Employees' Ret. System of Louisiana
- North Dakota State Retirement Board
- Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC)
- Nova Scotia Health Employees' Pension Fund
- Orange County ERS
- Oregon State Treasury
- Policemen's Annuity & Benefit Fund of Chicago
- Richmond Retirement System
- Sacramento County ERS
- San Diego City Employees' Retirement System
- Teachers' Retirement System of Louisiana
- Tulare County Employees' Retirement Association
- Washington State Investment Board

As of March 31, 2023.
This list is comprised of representative clients that have either given William Blair express permission to use their names or for whose services we provide have been made part of the public domain. Inclusion indicates the scope of clients served, but is not to be construed as an approval or disapproval of William Blair or its advisory services.

Global Portfolio Strategies

Our single, integrated investment platform is directed toward achieving portfolio objectives across all of our strategies

		Global	International	Emerging Markets
Leaders	High quality portfolios of leading companies across the corporate life cycle	Global Leaders $1.7 billion Global Leaders Concentrated $6 million Global Leaders Sustainability $91 million	International Leaders $10.3 billion International Leaders Concentrated $82 million International Leaders ADR $187 million / $372 million AUA[1]	Emerging Markets Leaders $4.8 billion Emerging Markets Leaders Concentrated $80 million
All Cap	Broad exposure across all market caps		International Growth $9.9 billion (closed)[2]	Emerging Markets Growth $6.2 billion Emerging Markets Ex China Growth $20 million
Small Cap	Broad exposure to small cap companies		International Small Cap Growth $2.1 billion (closed)[2]	Emerging Markets Small Cap Growth $978 million (closed)[2]
China	Broad exposure to high quality China-domiciled companies			China A-Shares Growth $310 million China Growth $2 million

Assets as of March 31, 2023.

[1]Assets Under Advisement (AUA) consists of assets managed by third parties in accordance with model portfolios provided by William Blair. William Blair does not have investment discretion or trading authority over these assets.

[2]Capacity management is an integral component of our investment process.

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Global Investment Team

One team, one philosophy, one process

Portfolio Management[1]

Global Leaders
Ken McAtamney, Partner (18/33)
Hugo Scott-Gall , Partner (5/29)[3]

International Growth
Simon Fennell, Partner (12/31)
Ken McAtamney, Partner (18/33)
Andrew Siepker, CFA, Partner (17/19)

International Leaders
Alaina Anderson, CFA, Partner (17/22)
Simon Fennell, Partner (12/31)
Ken McAtamney, Partner (18 /33)

International Leaders ADR
Alaina Anderson, CFA, Partner (17/22)

International Small Cap
Simon Fennell, Partner (12/31)
D.J. Neiman, CFA, Partner (21/25)

Emerging Markets Leaders
Todd McClone, CFA, Partner (23/31)
Ken McAtamney, Partner (18/33)
Hugo Scott-Gall , Partner (5 /29)[3]

Emerging Markets Growth
Todd McClone, CFA, Partner (23/31)
Casey Preyss, CFA, Partner (23/24)
Vivian Lin Thurston, CFA, Partner (8/27)

Emerging Markets Small Cap Growth
Todd McClone, CFA, Partner (23/31)
D.J. Neiman, CFA, Partner (21/25)[3]
Casey Preyss, CFA, Partner (23/24)

China A-Shares Growth
Casey Preyss, CFA, Partner (23/24)
Vivian Lin Thurston, CFA, Partner (8/27)

Global Fundamental Research Analysts[2]

Consumer
Daria Fomina (<1/14)
William Benton, CFA, CPA, Partner (26/26)[3]
Adam Dettmer, CFA (6/9)
Michael Patchen, CFA (4 /11)
Evelyn Kong, CFA, CPA (2/2)
Emily Moore, CFA (5/8)

Financials
Daniel Hill, CFA (18/18)
Esteban Gonzalez-Rosell (3/13)
Kalpit Shah, CFA (4/8)
Paul O'Toole (2/6)

Healthcare
Thomas Sternberg, CFA, Partner (18/20)
Richard Reznick, Ph.D. (13/13)
Jonathan Kaufman, CPA (7/7)

Industrials, Energy & Materials
Monika Budyn (10/14)
Anil Daka, CFA, Partner (12/15)
Ben Loss, CFA (12/13)
Bryan Shea (14/14)
Stephen Van Buren (1/4)
Koray Yesilli, CFA (1/1)

Information Technology
Greg Scolaro, CFA, CPA (9/9)
Drew Buckley, CFA, CPA, Partner (15/17)
Jayesh Kannan, CFA (5/10)
Nupur Balain (2/2)
Grant Parsons, CPA (4/7)

China Generalist
Sophie Gao, CFA (2/11)

U.S. Generalist
Gurvir Grewal (4/9)

Portfolio Specialists

Ryan Dimas, CFA, CAIA, Partner (23/28)
Romina Graiver, Partner (12/24)
Jeremy Murden, CAIA (12/18)[4]
Emily George (12/13)
Kyle Concannon, CFA, CAIA (8/16)
Jennifer Stange (9/13)
Amanda Schwartz (9/15)

Strategy Research

Hugo Scott-Gall, Partner (5/29)[3]
Olga Bitel, Partner (13/20)
Blake Pontius, CFA (18/26)[5]
Rita Spitz, CFA, Partner (37/45)
Alexa Davis (5/8)
Nicole Sarby (<1/7)

Systematic Research

Spiro Voulgaris, Partner (15/32)
Andrew Kominik, CFA (20/23)
Andy Tang, CFA (7/12)
Andrew Wickman, CFA (8/13)
Jesse Lambersky (1/12)
Scott Akeson (8/8)
Kathy Matos (16/16)

Technologist

Darragh Grogan (15/17)

Trading[6]

Asia/Pacific
Nathan Fisher, CFA (8/20)
Daniel Iannessa (18/20)
Malik Nicholson (9/17)

Europe
Nicola Hynds (15/28)
Simon Johnstone, Partner (10/23)
Akos Reitz (3/8)

Americas and FX
Terry O'Bryan, Partner (16/25)[7]

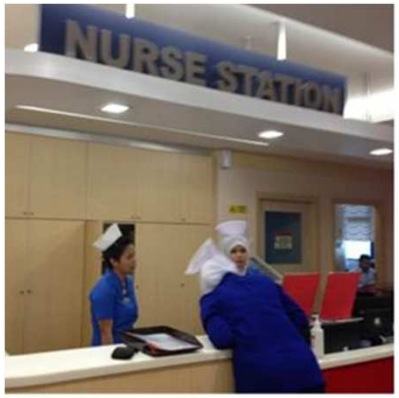
Portfolio & Trade Order Management
Joe Emanuele (6/8)
Tim Randick (16/16)

International Trade Data Specialists
Michael LaDuke (13/15)

(Years at William Blair/Years in Industry)
[1]Portfolio Management team average 16 years at William Blair and 27 years in the industry. [2]Global Fundamental Research Analysts average 10 years at William Blair and 14 years in the industry. [3]William Benton and Hugo Scott-Gall also serve as Co-Directors of Research. [4]10 years of experience at William Blair from April 2007 to 2016. Rejoined the firm in July 2021. [5]Blake Pontius is Director of Sustainable Investing for Investment Management. [6]Traders, excluding Portfolio and Trade Order Management and International Trade Specialists, average 11 years at William Blair and 20 years in the industry. [7]Terry O'Bryan also serves as the Head of Global Equity Trading. *Italics indicate Associate role.* As of April 2023.

Philosophy and Process

Photos courtesy of Tommy Sternberg, Casey Preyss, Vivian Lin Thurston









Investment Philosophy

We believe an integrated investment platform directed towards identifying companies with strong corporate performance will drive superior long-term investment returns

Sustainable Value Creation

Strong corporate performance is the driver of superior investment returns



Holistic Perspective

Evaluating the competitive landscape within a global and inclusive framework

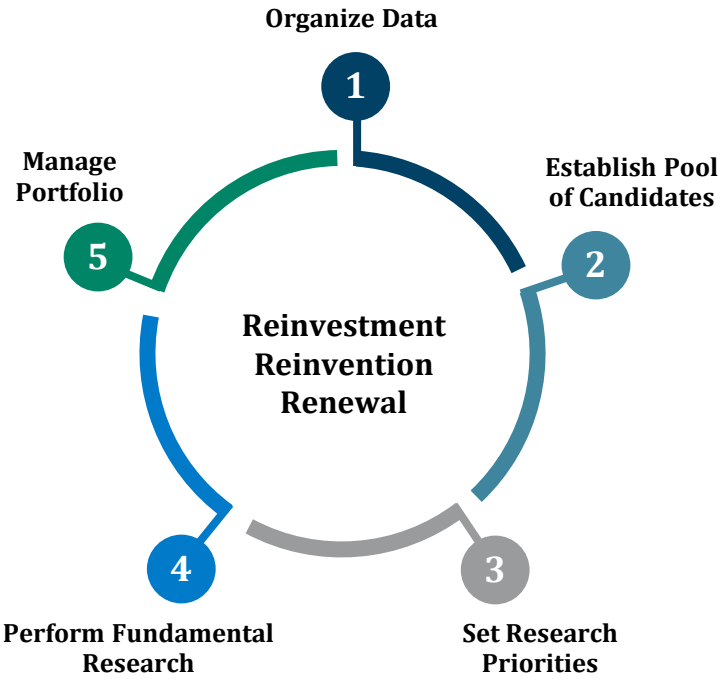
Systematic Research & Tools

Integrating the art and science of investing

Investment Process

Integrated Fundamental, Systematic and Strategy Research Throughout the Investment Process

1. **Organize Data**
   Rank order global universe of equities by fundamental and technical attributes and utilize systematic research to analyze information
2. **Establish Pool of Candidates**
   Create Eligibility List of 2,000- 2,500 companies through quantitative screens and fundamental analysis
3. **Set Research Priorities**
   Establish Research Agenda of 30-60 companies by identifying opportunities and risks through bottom up research, top down strategy, and portfolio objectives
4. **Perform Fundamental Research**
   Analyze sustainable value creation and determine if fundamentals appear poised to change
5. **Manage Portfolio**
   Weigh risk/reward of buy/sell decision to seek desired outcomes



Fund Attributes – International Growth CIT

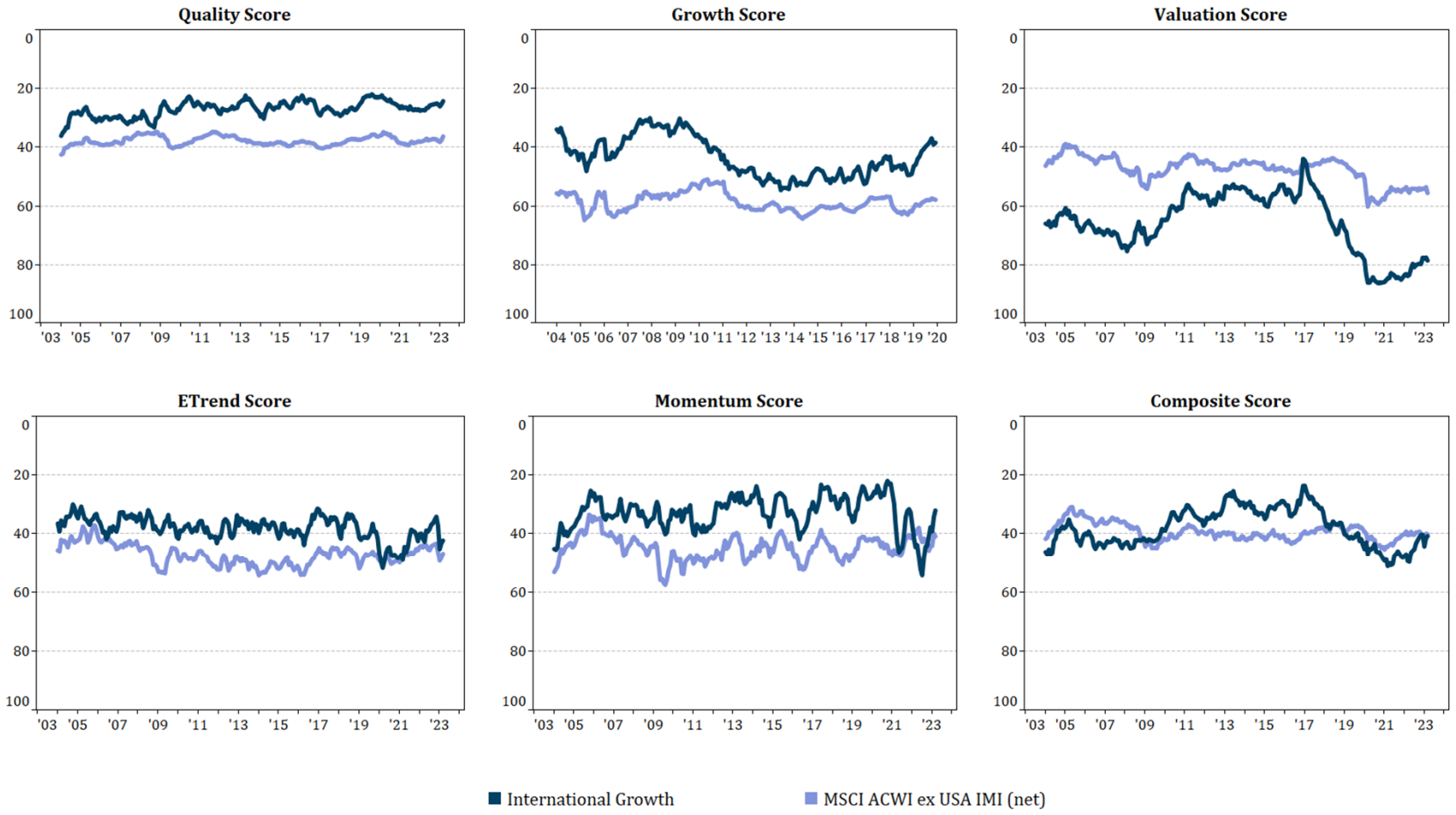
As of March 31, 2023

	International Growth CIT	MSCI AC World ex-US IMI Index	Difference
Quality			
WB Quality Model (Percentile)	24	36	
Return on Equity (%)	18.7	15.1	*24%*
Cash Flow ROIC (%)	17.6	15.2	*16%*
Debt/Equity (%)	61.6	85.5	*-28%*
Growth			
WB Growth Model (Percentile)	46	56	
Long-Term Growth (%)	14.2	11.2	*27%*
5-Year Historic EPS Growth (%)	9.8	8.7	*13%*
Reinvestment Rate (%)	13.7	10.0	*38%*
Earnings Trend			
WB Earnings Trend Model (Percentile)	42	47	
EPS Est Rev Breadth (%)	1.5	-1.4	*2.9*
Valuation			
WB Valuation Model (Percentile)	79	56	
P/E (Next 12 Months)	20.0	12.6	*58%*
Dividend Yield (%)	1.6	3.2	*-49%*
Other			
WB Composite Model (Percentile)	41	40	
Float-Adj. Weighted Average Market Cap ($MM)	62,719	59,361	*6%*
Number of Holdings	177	6,620	
Active Share	81.4	--	

The index is comparable to the strategy in terms of investment approach but contains significantly more securities. Calculated by William Blair. Aggregate scores shown above based on William Blair's quantitative model. For individual and composite ranks, 1 is best and 100 is worst. The Morgan Stanley Capital International (MSCI) All Country World ex-US Investable Market Index (IMI) (Net) is a free float-adjusted market capitalization index that is designed to measure equity market performance net of withholding taxes in the global developed and emerging markets, excluding the US. Not intended as investment advice.

International Growth Portfolio Characteristics

March 31, 2023



Aggregate scores shown above based on William Blair's quantitative model. For individual and composite ranks, 1 is best and 100 is worst.

Portfolio Analytics and Performance

Photos courtesy of Alaina Anderson and D.J. Neiman



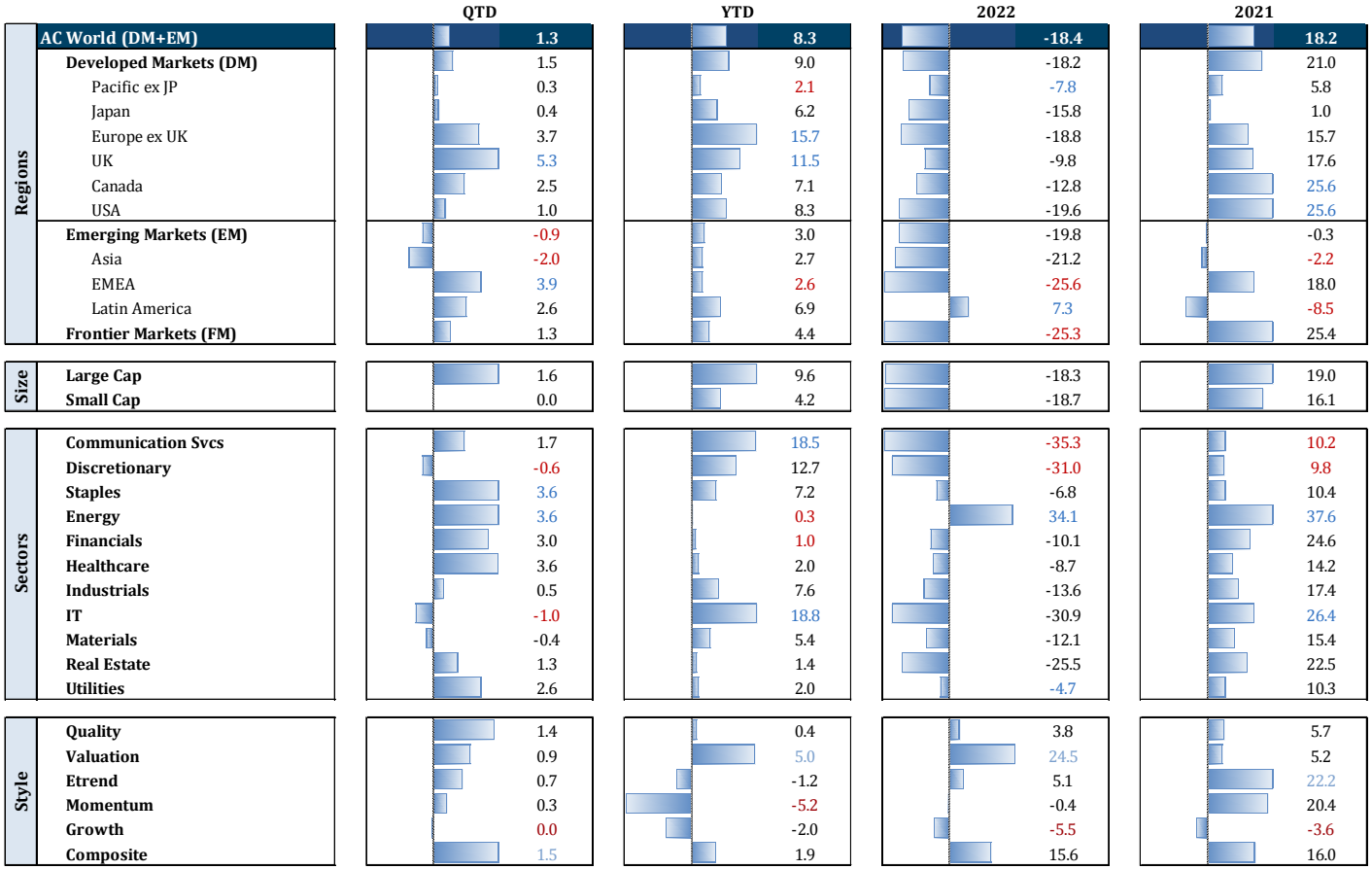
Barcelona



Tokyo

Market Performance – Global Equity Markets

April 30, 2023



		QTD	YTD	2022	2021
Regions	**AC World (DM+EM)**	**1.3**	**8.3**	**-18.4**	**18.2**
	Developed Markets (DM)	1.5	9.0	-18.2	21.0
	Pacific ex JP	0.3	2.1	-7.8	5.8
	Japan	0.4	6.2	-15.8	1.0
	Europe ex UK	3.7	15.7	-18.8	15.7
	UK	5.3	11.5	-9.8	17.6
	Canada	2.5	7.1	-12.8	25.6
	USA	1.0	8.3	-19.6	25.6
	Emerging Markets (EM)	-0.9	3.0	-19.8	-0.3
	Asia	-2.0	2.7	-21.2	-2.2
	EMEA	3.9	2.6	-25.6	18.0
	Latin America	2.6	6.9	7.3	-8.5
	Frontier Markets (FM)	1.3	4.4	-25.3	25.4
Size	**Large Cap**	1.6	9.6	-18.3	19.0
	Small Cap	0.0	4.2	-18.7	16.1
Sectors	**Communication Svcs**	1.7	18.5	-35.3	10.2
	Discretionary	-0.6	12.7	-31.0	9.8
	Staples	3.6	7.2	-6.8	10.4
	Energy	3.6	0.3	34.1	37.6
	Financials	3.0	1.0	-10.1	24.6
	Healthcare	3.6	2.0	-8.7	14.2
	Industrials	0.5	7.6	-13.6	17.4
	IT	-1.0	18.8	-30.9	26.4
	Materials	-0.4	5.4	-12.1	15.4
	Real Estate	1.3	1.4	-25.5	22.5
	Utilities	2.6	2.0	-4.7	10.3
Style	**Quality**	1.4	0.4	3.8	5.7
	Valuation	0.9	5.0	24.5	5.2
	Etrend	0.7	-1.2	5.1	22.2
	Momentum	0.3	-5.2	-0.4	20.4
	Growth	0.0	-2.0	-5.5	-3.6
	Composite	1.5	1.9	15.6	16.0

Regional performance is based on IMI region/country indexes. Sector and style values are based on the MSCI ACWI IMI Index. Size values are based on the MSCI ACWI Index. Style values reflect the Quintile 1 minus Quintile 5 spread of William Blair's proprietary quantitative models. Sectors are based on Global Industry Classification (GICS) sectors. Large Cap and Small Cap based on MSCI Global Investable Market Index Methodology. Data in blue reflects the top 20% (highest) values by region, country, sector, and style. Data in red reflects the bottom 20% (lowest) values by region, country, sector, and style.

Past performance is not indicative of future returns. A direct investment in an unmanaged index is not possible. The Morgan Stanley Capital International (MSCI) All Country World IMI Index is an unmanaged index that includes developed markets and emerging markets. Calculated in FactSet. All index returns are net of dividends. S&P Dow Jones Indices (S&P DJI) and MSCI have revised the GICS structure effective the close of business March 17, 2023. William Blair has implemented these revisions in applicable portfolio and index data shown above. MSCI's implementation is expected to be on close of business May 31, 2023.

Performance Summary

For periods ending March 31, 2023

			Annualized			
Performance (%)	**1Q23**	**1 Yr**	**3 Yr**	**5 Yr**	**10 Yr**	**Since Inception (10/2/2003)**
Institutional International Growth CIT	**8.41**	**-7.75**	**11.96**	**3.93**	**5.50**	**6.98**
MSCI AC World ex-US IMI Index	6.56	-5.84	12.20	2.35	4.28	6.32

Calendar Year Performance (%)	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Institutional International Growth CIT	**-28.28**	**9.39**	**32.47**	**30.75**	**-17.50**	**29.53**	**-2.40**	**0.09**	**-2.66**	**18.90**
MSCI AC World ex-US IMI Index	-16.58	8.53	11.12	21.63	-14.76	27.81	4.41	-4.60	-3.89	15.82

Calendar Year Performance (%)	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**	**2006**	**2005**	**2004**	**2003[1]**
Institutional International Growth Fund	**24.11**	**-13.66**	**20.10**	**42.83**	**-51.99**	**18.49**	**23.45**	**22.76**	**18.15**	**14.29**
MSCI AC World ex-US IMI Index	17.04	-14.31	12.73	43.60	-45.99	16.13	26.51	17.68	21.93	16.54

1. Fort Pierce Inception Date: 10/2/2003
2. On 2/28/23 the account transitioned from the Institutional International Growth Mutual Fund to the Collective Investment Trust. The performance shown links the two.

Performance cited represents past performance. Past performance does not guarantee future results and current performance may be lower or higher than the data quoted. Returns shown assume reinvestment of dividends and capital gains. Investment returns and principal will fluctuate with market and economic conditions and you may have a gain or loss when you sell shares. For the most current month-end performance information, please call 1-800- 742-7272, or visit our Web site at www.williamblairfunds.com. Institutional Class shares are available to certain institutional investors.

The Morgan Stanley Capital International (MSCI) AC World ex-U.S. IMI Index (net) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets, excluding the United States. This series approximates the minimum possible dividend reinvestment. An index is unmanaged, does not incur fees or expenses, and cannot be invested in directly

City of Fort Pierce Retirement and Benefit System Portfolio

As of March 31, 2023

Original Investment (10/2/2003)	$10,392,820
+ Contributions	$9,800,000
- Withdrawals	-$18,727,816
- (Investment Management Fees & Other Expenses[1])	-$2,752,003
+ Dividend Income and Capital Gain Distribution	$21,099,274
+/- Market Appreciation/(Depreciation)	$7,352,631
Market Value	**$27,164,906**

1. The investment management fee and other expenses are estimates.

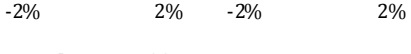
Performance Attribution Quarter-to-Date – International Growth CIT

As of March 31, 2023

Attribution by Sector (%)	Allocation Effect	Selection Effect	Total Effect
Comm. Services			-0.18
Discretionary			0.39
Staples			0.06
Energy			-0.16
Financials			0.03
Health Care			0.35
Industrials			0.60
IT			0.60
Materials			0.29
Real Estate			0.28
Utilities			0.13



Attribution by Region (%)	Allocation Effect	Selection Effect	Total Effect
Asia ex-Japan			-0.07
Japan			0.32
Europe ex-UK			1.64
UK			0.32
W. Hemisphere			-0.23
EM Asia			-0.06
EMEA			0.24
Latin America			0.20



Top 5 Contributors (%)

Security	Sector	Country	Contribution to Relative Return
Infineon Technologies AG	IT	Germany	0.29
Amadeus IT Group SA	Discretionary	Spain	0.25
DSV A/S	Industrials	Denmark	0.20
MercadoLibre Inc	Discretionary	Brazil	0.18
Hermes International	Discretionary	France	0.18

Top 5 Detractors (%)

Security	Sector	Country	Contribution to Relative Return
Reliance Industries Ltd	Energy	India	-0.16
Tenaris SA	Energy	Luxembourg	-0.15
Nihon M&A Center Holdings Inc	Industrials	Japan	-0.12
Genmab A/S	Health Care	Denmark	-0.11
AIA Group Ltd	Financials	Hong Kong	-0.11

Past performance is not indicative of future returns. Gross investment performance assumes reinvestment of dividends and capital gains, is gross of investment management fees and net of transaction costs. Performance results will be reduced by the fees incurred in the management of the account. For example, assuming an annual gross return of 8% and an annual management/advisory fee of .40%, the net annualized total return of the portfolio would be 7.58% over a 5-year period. Net investment performance represents the deduction of the account's actual fee. Investment management fees are described in William Blair's Form ADV Part 2A. Attribution by segment is based on estimated returns of equities held within the segments listed. All stocks held during a measurement period, including purchases and sales, are included. Cash is not allocated among segments. Calculations are for attribution analysis only and are not intended to represent simulated performance history. The actual returns may be higher or lower. We calculate attribution using our proprietary attribution system. Our proprietary attribution system runs transactions-based attribution, taking into account all trading activity. Interaction effect is reallocated into Selection effect. Sectors based on Global Industry Classification (GICS) Sectors. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic and political risk. The Morgan Stanley Capital International (MSCI) All Country World ex-US Investable Market Index (IMI) (Net) is a free float-adjusted market capitalization index that is designed to measure equity market performance net of withholding taxes in the global developed and emerging markets, excluding the US. Individual securities listed in this report are for informational purposes only. Holdings are subject to change at any time. This information does not constitute, and should not be construed as, investment advice or recommendations with respect to the securities listed.

Performance Attribution 2022 – International Growth CIT

As of December 31, 2022

Attribution by Sector (%)	Allocation Effect	Selection Effect	Total Effect
Comm. Services			-0.41
Discretionary			-0.24
Staples			-0.66
Energy			-0.48
Financials			-1.08
Health Care			-2.22
Industrials			-3.07
IT			-2.36
Materials			-0.93
Real Estate			-0.13
Utilities			-0.20



Attribution by Region (%)	Allocation Effect	Selection Effect	Total Effect
Asia ex-Japan			-0.88
Japan			-1.70
Europe ex-UK			-6.34
UK			-1.59
W. Hemisphere			-0.07
EM Asia			-0.79
EMEA			0.14
Latin America			-0.54

Top 5 Contributors (%)

Security	Sector	Country	Contribution to Relative Return
Novo Nordisk A/S	Health Care	Denmark	0.32
Bank Central Asia Tbk PT	Financials	Indonesia	0.31
Tenaris SA	Energy	Luxembourg	0.27
AIA Group Ltd	Financials	Hong Kong	0.24
Compass Group PLC	Discretionary	United Kingdom	0.24

Top 5 Detractors (%)

Security	Sector	Country	Contribution to Relative Return
Sika AG	Materials	Switzerland	-0.36
MediaTek Inc	IT	Taiwan	-0.35
Atlassian Corp Ltd	IT	Australia	-0.33
Partners Group Holding AG	Financials	Switzerland	-0.33
Kingspan Group PLC	Industrials	Ireland	-0.32

Past performance is not indicative of future returns. Gross investment performance assumes reinvestment of dividends and capital gains, is gross of investment management fees and net of transaction costs. Performance results will be reduced by the fees incurred in the management of the account. For example, assuming an annual gross return of 8% and an annual management/advisory fee of .40%, the net annualized total return of the portfolio would be 7.58% over a 5-year period. Net investment performance represents the deduction of the account's actual fee. Investment management fees are described in William Blair's Form ADV Part 2A. Attribution by segment is based on estimated returns of equities held within the segments listed. All stocks held during a measurement period, including purchases and sales, are included. Cash is not allocated among segments. Calculations are for attribution analysis only and are not intended to represent simulated performance history. The actual returns may be higher or lower. We calculate attribution using our proprietary attribution system. Our proprietary attribution system runs transactions-based attribution, taking into account all trading activity. Interaction effect is reallocated into Selection effect. Sectors based on Global Industry Classification (GICS) Sectors. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic and political risk. The Morgan Stanley Capital International (MSCI) All Country World ex-US Investable Market Index (IMI) (Net) is a free float-adjusted market capitalization index that is designed to measure equity market performance net of withholding taxes in the global developed and emerging markets, excluding the US. Individual securities listed in this report are for informational purposes only. Holdings are subject to change at any time. This information does not constitute, and should not be construed as, investment advice or recommendations with respect to the securities listed.

International Growth Strategy Performance in Various Environments

Arithmetic Avg Quarterly Return (%)

		Portfolio (Gross)	Benchmark	
All Quarters (4Q96 - 1Q23)		2.8	1.7	
Quarters in which:	Outperformance			
Index Rose	✓	9.1	7.6	(65/106 Qs)
Index Declined	✓	-7.1	-7.7	(41/106 Qs)
MSCI Growth (Net) Outperformed	✓	4.2	1.9	(56/106 Qs)
MSCI Value(Net) Outperformed		1.3	1.4	(50/106 Qs)
MSCI Small Cap (Net) Outperformed	✓	5.0	3.6	(57/106 Qs)
MSCI EAFE (Net) Outperformed	✓	-1.2	-2.0	(46/106 Qs)
MSCI EM IMI (Net) Outperformed	✓	6.3	4.7	(54/106 Qs)

Consistent outperformance in a variety of market environments. Annualized return of 9.19% (gross) and 8.27% (net) vs. 4.82% for the benchmark since we began managing international equity in house (October 1, 1996).

Composite Inception is December 1, 1992. Data above reflects since inception of the strategy's current management style. At this time, changes were made to the portfolio management team and the way the philosophy was implemented. Actual composite inception precedes this date. This information is supplemental to the composite disclosure slide located in the appendix.

Past performance is not indicative of future returns. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A**.** The benchmark that best reflects the composite's investment strategy is the MSCI All Country World Ex US Investable Market Index (net), which is a free float-adjusted market capitalization index that is designed to measure equity market performance, net of withholding taxes, in the global developed and emerging markets, excluding the US. Prior to 1995, the MSCI All Country World Ex US Index preceded the current benchmark as returns are unavailable back to composite inception for the current benchmark. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic and political risk. Based on data from the William Blair International Growth Fund, which is closed to new investors. Calculations are for attribution analysis only and are not intended to represent simulated performance history. Regional attribution is based on estimated US$ price-only returns of equities held within regions for the period Q4 1996 to Q3 2003. Beginning Q3 2003, the returns represent the estimated total equity-only returns of securities held within regions. All stocks held during a measurement period, including purchases and sales, are included. Cash is not allocated among regions and all returns are exclusive of cash. A rounding discrepancy may occur when calculating backup data. Please see GIPS Composite Report in appendix for a complete description of the composite. Please refer to the performance summary slide for complete performance information.

International Growth Strategy

Performance analysis by geography

Oct 1 96 to Mar 31 23	Portfolio (Gross)	Index
United Kingdom		
Cumulative	721.4%	309.7%
Annualized	8.4%	5.5%
Europe + ME ex-UK		
Cumulative	1100.5%	417.2%
Annualized	9.9%	6.4%
Japan		
Cumulative	288.6%	61.6%
Annualized	5.3%	1.8%
Pacific ex-Japan		
Cumulative	526.7%	411.3%
Annualized	7.2%	6.4%
Canada		
Cumulative	1103.0%	630.4%
Annualized	9.9%	7.8%

Composite Inception is December 1, 1992. Data above reflects since inception of the strategy's current management style. At this time, changes were made to the portfolio management team and the way the philosophy was implemented. Actual composite inception precedes this date. This information is supplemental to the composite disclosure slide located in the appendix.

Past performance is not indicative of future returns. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A**.** The benchmark that best reflects the composite's investment strategy is the MSCI All Country World Ex US Investable Market Index (net), which is a free float-adjusted market capitalization index that is designed to measure equity market performance, net of withholding taxes, in the global developed and emerging markets, excluding the US. Prior to 1995, the MSCI All Country World Ex US Index preceded the current benchmark as returns are unavailable back to composite inception for the current benchmark. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic and political risk. Based on data from the William Blair International Growth Fund. Calculations are for attribution analysis only and are not intended to represent simulated performance history. All stocks held during the measurement period, including purchases and sales, are included. Cash is not allocated among regions and all returns are exclusive of cash. (1) MSCI UK IMI (net), (2)MSCI Europe ex UK IMI (net), (3) MSCI Japan IMI (net), (4) MSCI Pacific ex-Japan IMI (net), and (5) MSCI Canada IMI (net). A rounding discrepancy may occur when calculating backup data. Please see GIPS Composite Report in appendix for a complete description of the composite. Please refer to the performance summary slide for complete performance information.

International Growth Strategy

Performance analysis by subsector

Oct 1 96 to Mar 31 23	Portfolio (Gross)	Index
Developed Large/Mid Cap[1]		
Cumulative	890.0%	236.7%
Annualized	9.0%	4.7%
Developed Small Cap[2]		
Cumulative	1093.1%	321.6%
Annualized	9.8%	5.6%
Emerging Markets[3]		
Cumulative	1438.9%	203.5%
Annualized	10.9%	4.3%

Composite Inception is December 1, 1992. Data above reflects since inception of the strategy's current management style. At this time, changes were made to the portfolio management team and the way the philosophy was implemented. Actual composite inception precedes this date. This information is supplemental to the composite disclosure slide located in the appendix. **Past performance is not indicative of future returns**. Performance is shown in U.S. dollar unless otherwise noted. Returns for periods greater than one year are annualized. Performance results assume the reinvestment of dividends and capital gains and are net of transaction costs. Net investment performance represents the deduction of a model fee equal to the highest separate account management fee. Investment management fees are described in William Blair's Form ADV Part 2A. The benchmark that best reflects the composite's investment strategy is the MSCI All Country World Ex US Investable Market Index (net), which is a free float-adjusted market capitalization index that is designed to measure equity market performance, net of withholding taxes, in the global developed and emerging markets, excluding the US. Prior to 1995, the MSCI All Country World Ex US Index preceded the current benchmark as returns are unavailable back to composite inception for the current benchmark. International investing involves special risk considerations, including currency fluctuations, lower liquidity, economic and political risk. Based on data from the William Blair International Growth Fund. Calculations are for attribution analysis only and are not intended to represent simulated performance history. Prior to Q3 1998, small cap is defined as companies with a market capitalization of under $1 billion. From Q3 1998 to Q4 2003, small cap is defined as companies with a market capitalization of under $1.5 billion. From Q4 2003 to Q4 2007, small cap is defined as companies with a market capitalization of under $2 billion. Beginning Q4 2007, small cap is defined as companies with a market capitalization of under $3 billion. Beginning with Q3 2014, small cap is defined as companies with a market capitalization of under $4 billion, mid cap is adjusted to $4 billion to $15 billion, and large cap to over $15 billion. For the Large/Mid Cap and Small Cap Segments, is a price-only estimate based on the average month-end market values during the quarter prior for Q4 1998. From Q4 1998 to Q4 1999, Large/Mid Cap and Small Cap segment performance is a total-return estimate based on a monthly buy-and-hold calculation. Beginning Q1 2000, Large/Mid Cap and Small Cap segment performance is a total return estimate based on a daily buy-and-hold calculation. Developed market companies without readily available market capitalization data and cash are excluded. Emerging markets return data represents the returns of the Emerging Markets Growth composite until 1/1/2007 and then the emerging portion of international growth thereafter. Indices: (1) MSCI EAFE; (2) MSCI World ex-US Small Cap (Net); (3) MSCI EM IMI. For consistency, index returns prior to Q4 1998 are price-only except for emerging markets. Beginning with Q4 1998, index returns are total return. Source: FactSet Portfolio Analysis and SPAR. Please see GIPS Composite Report in appendix for a complete description of the composite. Please refer to the performance summary slide for complete performance information.

Positioning and Strategy

Photos courtesy of Ken McAtamney, Drew Buckley, Joel Gomberg, Andy Flynn and Jack Murphy







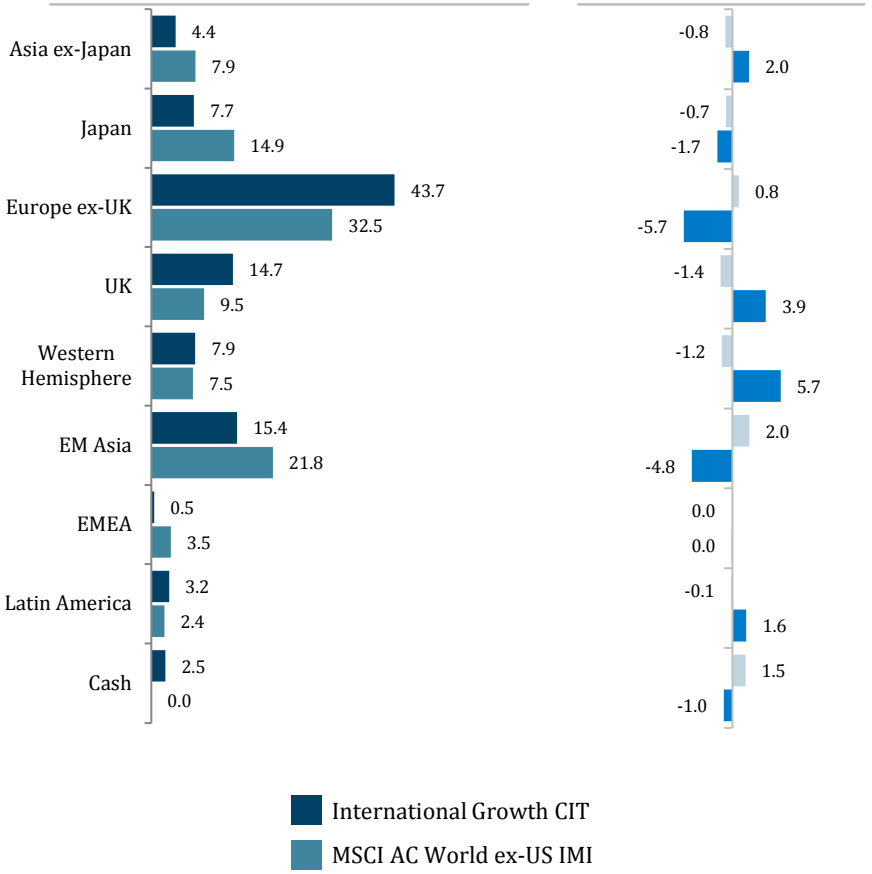




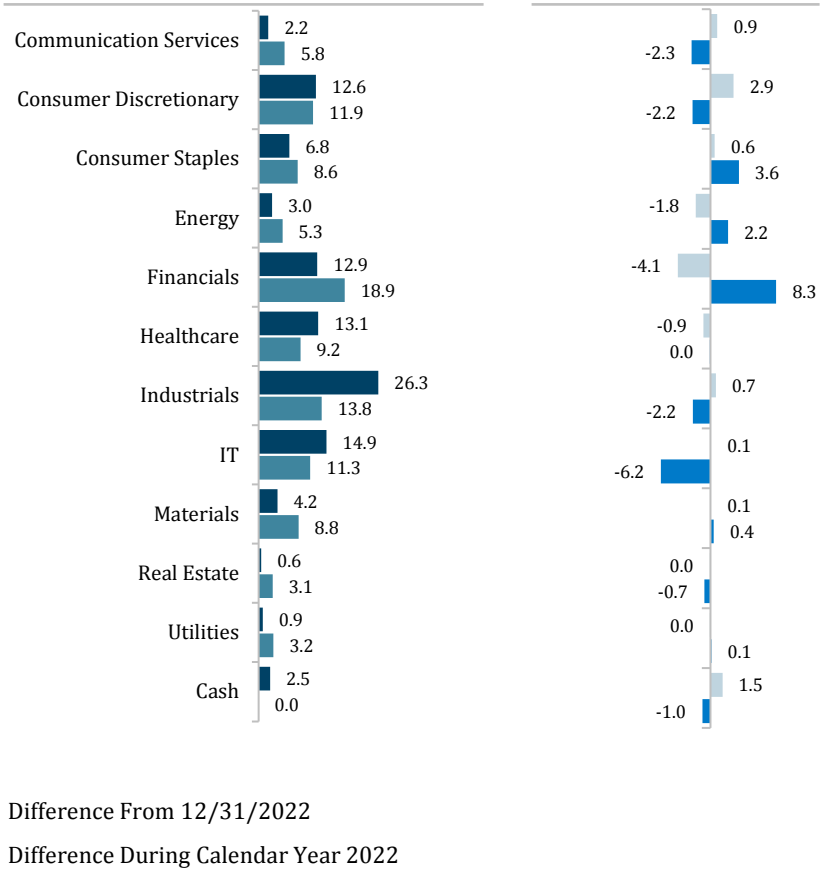
Fund Positioning – International Growth CIT

For Periods Ending March 31, 2023

Regional Exposure



Sectoral Exposure





Cash incorporates cash equivalents and accruals. Region and sector distribution calculated in Eagle based on Global Industry Classification (GICS) Sectors. The benchmark is the Morgan Stanley Capital International (MSCI) All Country World ex-US Investable Market Index (IMI) (Net), which is a free float-adjusted market capitalization index that is designed to measure equity market performance net of withholding taxes in the global developed and emerging markets, excluding the US. Not intended as investment advice.

Fund Top Holdings and Changes – International Growth CIT

As of March 31, 2023

Security Name	Country	Sector	Portfolio Weight
Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	Information Technology	1.79
Novo Nordisk A/S	Denmark	Health Care	1.72
Keyence Corp	Japan	Information Technology	1.59
Compass Group Plc	United Kingdom	Consumer Discretionary	1.58
Astrazeneca Plc	United Kingdom	Health Care	1.53
Dsv A/S	Denmark	Industrials	1.46
Thales Sa	France	Industrials	1.45
Amadeus It Group Sa	Spain	Consumer Discretionary	1.43
Alibaba Group Holding Ltd	China	Consumer Discretionary	1.43
Canadian Pacific Railway Ltd	Canada	Industrials	1.43
Total			**15.41**

Top Portfolio Changes During the Quarter[1]

	Security Name	Country	Sector
Purchases	Tencent Holdings Ltd	China	Communication Services
	Kweichow Moutai Co Ltd-A	China	Consumer Staples
	Ferrari Nv	Italy	Consumer Discretionary
	Hannover Rueck Se	Germany	Financials
	China Tourism Group Duty F-A	China	Consumer Discretionary
Liquidations	Kbc Group Nv	Belgium	Financials
	Neste Oyj	Finland	Energy
	Olympus Corp	Japan	Health Care
	Finecobank Spa	Italy	Financials
	Byd Co Ltd -A	China	Consumer Discretionary

1. Reflects largest purchases and sales during the quarter.

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Holdings: International Growth CIT

March 31, 2023

	Portfolio Weight
Developed/Asia - Ex Japan	**4.36**
Australia	1.90
Csl Ltd	1.31
Steadfast Group Ltd	0.24
Pro Medicus Ltd	0.23
Idp Education Ltd	0.13
Hong Kong	1.78
Aia Group Ltd	1.21
Techtronic Industries Co Ltd	0.57
Singapore	0.67
Dbs Group Holdings Ltd	0.67
Developed/Asia - Japan	**7.68**
Japan	7.68
Keyence Corp	1.59
Daikin Industries Ltd	1.25
Shin-Etsu Chemical Co Ltd	0.81
Hoya Corp	0.72
Tokio Marine Holdings Inc	0.48
Technopro Holdings Inc	0.34
Tis Inc	0.29
Monotaro Co Ltd	0.28
Disco Corp	0.27
Baycurrent Consulting Inc	0.25
Gmo Payment Gateway Inc	0.20
Shift Inc	0.19
Food & Life Companies Ltd	0.18
Japan Elevator Service Holdi	0.16
Nihon M&A Center Holdings In	0.15
Rakus Co Ltd	0.15
Benefit One Inc	0.13
Harmonic Drive Systems Inc	0.13
Sms Co Ltd	0.12
Developed/Europe - Middle East - Ex U.K.	**43.71**
Belgium	0.16
Warehouses De Pauw Sca	0.16
Denmark	4.35
Novo Nordisk A/S-B	1.72
Dsv A/S	1.46

	Portfolio Weight
Developed/Europe - Middle East - Ex U.K. (Cont.)	
Denmark (Cont.)	
Genmab A/S	0.75
Coloplast-B	0.41
Finland	0.23
Metso Outotec Oyj	0.23
France	13.47
Thales Sa	1.45
L'Oreal	1.34
Hermes International	1.33
Lvmh Moet Hennessy Louis Vui	1.31
Vinci Sa	1.31
Airbus Se	1.30
Safran Sa	1.30
Dassault Systemes Se	1.25
Capgemini Se	0.83
Teleperformance	0.78
Sartorius Stedim Biotech	0.51
Totalenergies Se	0.47
Seb Sa	0.16
Ses Imagotag	0.13
Germany	4.23
Infineon Technologies Ag	1.42
Mtu Aero Engines Ag	1.33
Hannover Rueck Se	0.48
Cts Eventim Ag & Co Kgaa	0.40
Carl Zeiss Meditec Ag - Br	0.31
Nemetschek Se	0.18
Siltronic Ag	0.12
Ireland	2.90
Linde Plc	1.26
Icon Plc	1.15
Kingspan Group Plc	0.49
Israel	0.82
Nice Ltd - Spon Adr	0.43
Inmode Ltd	0.21
Mizrahi Tefahot Bank Ltd	0.19

	Portfolio Weight
Developed/Europe - Middle East - Ex U.K. (Cont.)	
Italy	1.79
Ferrari Nv	0.55
Brunello Cucinelli Spa	0.40
Moncler Spa	0.34
Amplifon Spa	0.24
Brembo Spa	0.14
Azimut Holding Spa	0.13
Luxembourg	0.42
Tenaris Sa	0.42
Netherlands	3.12
Asml Holding Nv	1.37
Adyen Nv	0.52
Be Semiconductor Industries	0.38
Imcd Nv	0.35
Euronext Nv	0.30
Jde Peet'S Nv	0.21
Norway	0.76
Equinor Asa	0.37
Autostore Holdings Ltd	0.22
Gjensidige Forsikring Asa	0.16
Spain	1.87
Amadeus It Group Sa	1.43
Edp Renovaveis Sa	0.44
Sweden	3.65
Hexagon Ab-B Shs	0.92
Atlas Copco Ab-A Shs	0.77
Evolution Ab	0.61
Lifco Ab-B Shs	0.33
Beijer Ref Ab	0.32
Indutrade Ab	0.29
Hemnet Group Ab	0.16
Sweco Ab-B Shs	0.15
Vitrolife Ab	0.10
Switzerland	5.95
Lonza Group Ag-Reg	1.36
Zurich Insurance Group Ag	0.80

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Holdings: International Growth CIT

March 31, 2023

	Portfolio Weight
Developed/Europe - Middle East - Ex U.K. (Cont.)	
Switzerland (Cont.)	
Sika Ag-Reg	0.73
Straumann Holding Ag-Reg	0.61
Partners Group Holding Ag	0.52
Sig Group Ag	0.48
Tecan Group Ag-Reg	0.39
Vat Group Ag	0.34
Galenica Ag	0.28
Belimo Holding Ag-Reg	0.24
Siegfried Holding Ag-Reg	0.20
Developed/Europe - U.K.	**14.65**
United Kingdom	14.65
Compass Group Plc	1.58
Astrazeneca Plc	1.53
London Stock Exchange Group	1.17
Diageo Plc	1.10
Experian Plc	0.92
Rentokil Initial Plc	0.89
Ashtead Group Plc	0.76
Halma Plc	0.73
3I Group Plc	0.53
Sse Plc	0.51
Bunzl Plc	0.51
Convatec Group Plc	0.48
Spirax-Sarco Engineering Plc	0.47
Rotork Plc	0.44
Croda International Plc	0.37
Weir Group Plc/The	0.31
Greggs Plc	0.30
Intermediate Capital Group	0.30
Diploma Plc	0.28
Segro Plc	0.23
Spectris Plc	0.22
Beazley Plc	0.21
Big Yellow Group Plc	0.20
Cvs Group Plc	0.18
Softcat Plc	0.16

	Portfolio Weight
Developed/Europe - U.K. (Cont.)	
United Kingdom (Cont.)	
Renishaw Plc	0.15
Abcam Plc-Spon Adr	0.12
Developed/N America	**7.92**
Canada	7.92
Canadian Pacific Railway Ltd	1.43
Canadian Natl Railway Co	1.21
Dollarama Inc	1.03
Intact Financial Corp	0.92
Metro Inc/Cn	0.78
Toronto-Dominion Bank	0.73
Lululemon Athletica Inc	0.45
Toromont Industries Ltd	0.39
Ccl Industries Inc - Cl B	0.36
Parkland Corp	0.25
Kinaxis Inc	0.23
Boyd Group Services Inc	0.15
Emerging/Asia	**15.40**
China	5.55
Alibaba Group Holding Ltd	1.43
Tencent Holdings Ltd	1.07
Kweichow Moutai Co Ltd-A	0.74
Shenzhen Inovance Technolo-A	0.58
China Tourism Group Duty F-A	0.38
Jd.Com Inc - Cl A	0.33
Airtac International Group	0.28
Contemporary Amperex Techn-A	0.25
Foshan Haitian Flavouring -A	0.25
Proya Cosmetics Co Ltd-A	0.15
Silergy Corp	0.11
India	4.99
Reliance Industries Ltd	1.26
Hdfc Bank Limited	1.20
Hindustan Unilever Ltd	0.50
Infosys Ltd	0.45
Interglobe Aviation Ltd	0.28
Havells India Ltd	0.23

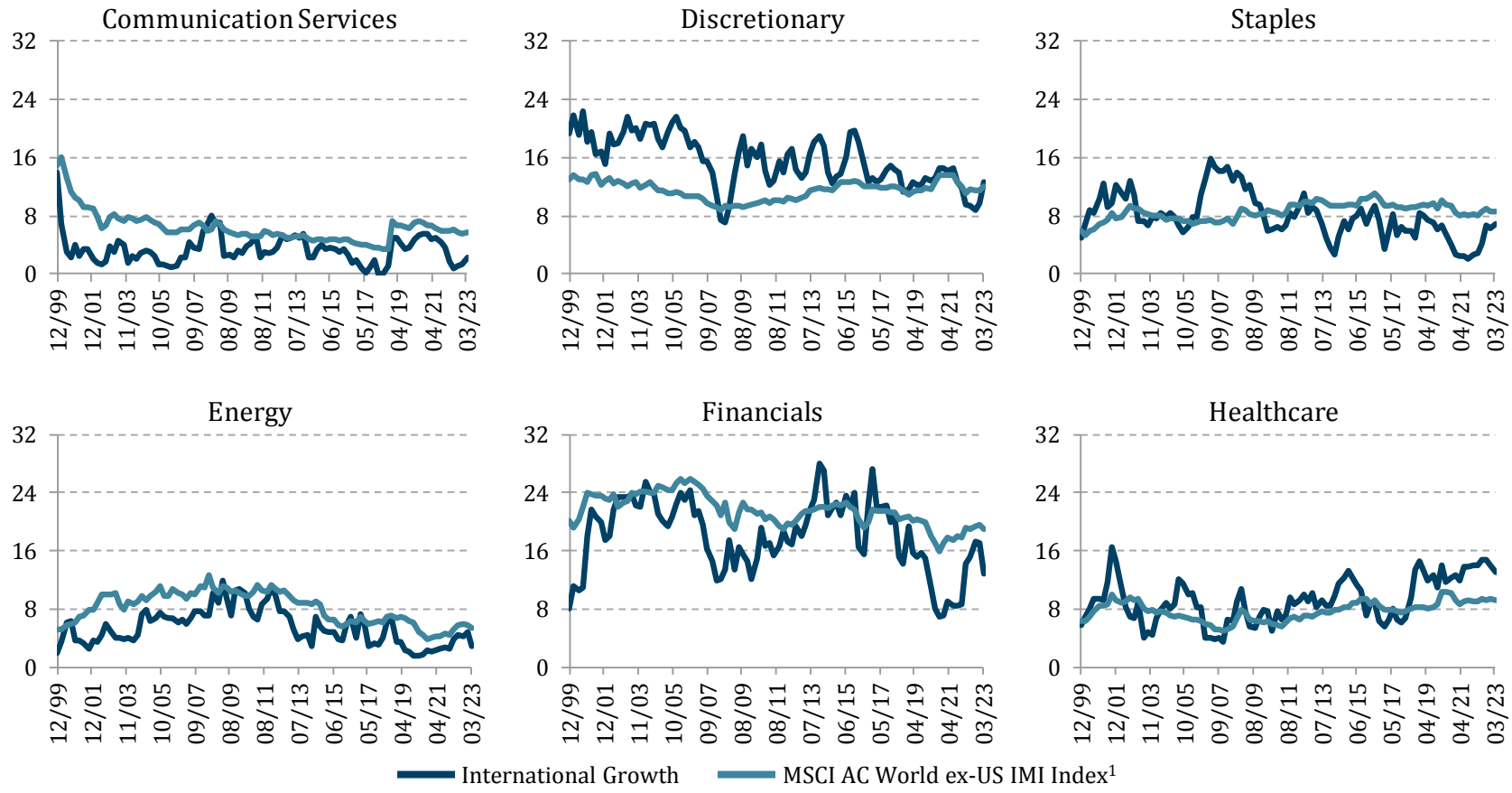
	Portfolio Weight
Emerging/Asia (Cont.)	
India (Cont.)	
Petronet Lng Ltd	0.22
Upl Ltd	0.19
Britannia Industries Ltd	0.18
Apollo Hospitals Enterprise	0.18
Voltas Ltd	0.17
Max Healthcare Institute Ltd	0.13
Indonesia	1.83
Bank Central Asia Tbk Pt	1.27
Telkom Indonesia Persero Tbk	0.56
South Korea	0.47
Samsung Sdi Co Ltd	0.47
Taiwan	2.55
Taiwan Semiconductor-Sp Adr	1.79
Mediatek Inc	0.63
Globalwafers Co Ltd	0.13
Emerging/Emea	**0.51**
South Africa	0.37
Bid Corp Ltd	0.37
United Arab Emirates	0.14
First Abu Dhabi Bank Pjsc	0.14
Emerging/Latin America	**3.22**
Argentina	0.25
Globant Sa	0.25
Brazil	1.49
Mercadolibre Inc	0.54
B3 Sa-Brasil Bolsa Balcao	0.34
Weg Sa	0.19
Raia Drogasil Sa	0.18
Rumo Sa	0.17
Locaweb Servicos De Internet	0.08
Mexico	1.30
Walmart De Mexico Sab De Cv	0.97
Grupo Aeroportuario Sur-Adr	0.33
Peru	0.18
Credicorp Ltd	0.18
Cash & Equivalents	**2.54**
Total:	**100.00**

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Historical International Growth Sector Weightings

As of March 31, 2023

% of Portfolio

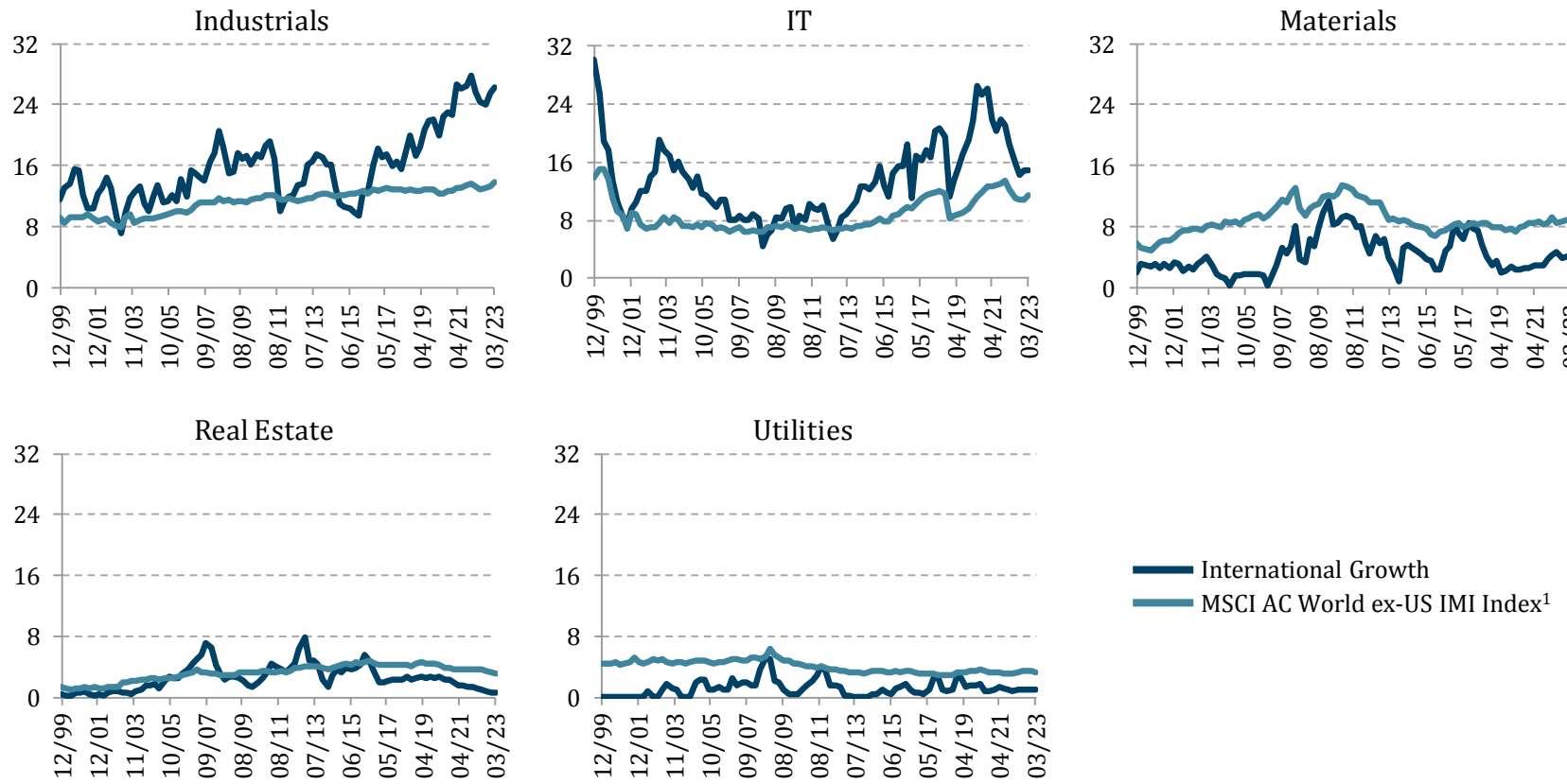


[1]Prior to March 31, 2003, benchmark data is taken from the MSCI AC World ex-US Index.
The data shown above is based on the strategy's representative portfolio. Sector diversification calculated in Eagle by William Blair based on Global Industry Classification Sectors (GICS). Weights may vary over time as benchmark index weights shift. The index is comparable to the strategy in terms of investment approach but contains significantly more securities. Cash incorporates cash equivalents and accruals. Cash is a residual of the stock selection process. Sectors based on GICS (Global Industry Classification Sectors). S&P Dow Jones Indices (S&P DJI) and MSCI have revised the GICS structure effective the close of business March 17, 2023. William Blair has implemented these revisions in applicable portfolio and index data shown above. MSCI's implementation is expected to be on close of business May 31, 2023.

Historical International Growth Sector Weightings

As of March 31, 2023

% of Portfolio

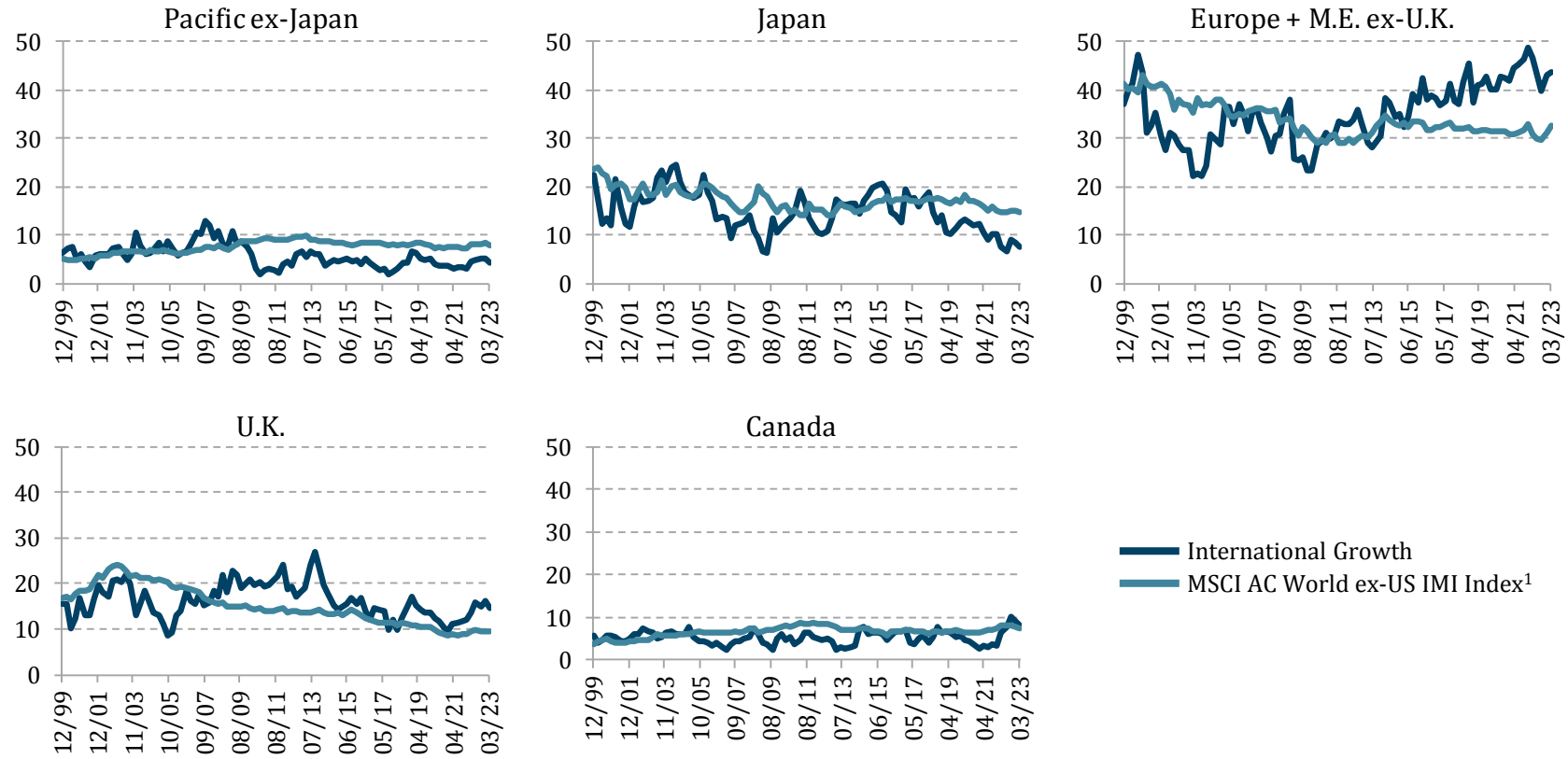


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Historical International Growth Regional Weightings

As of March 31, 2023

% of Portfolio

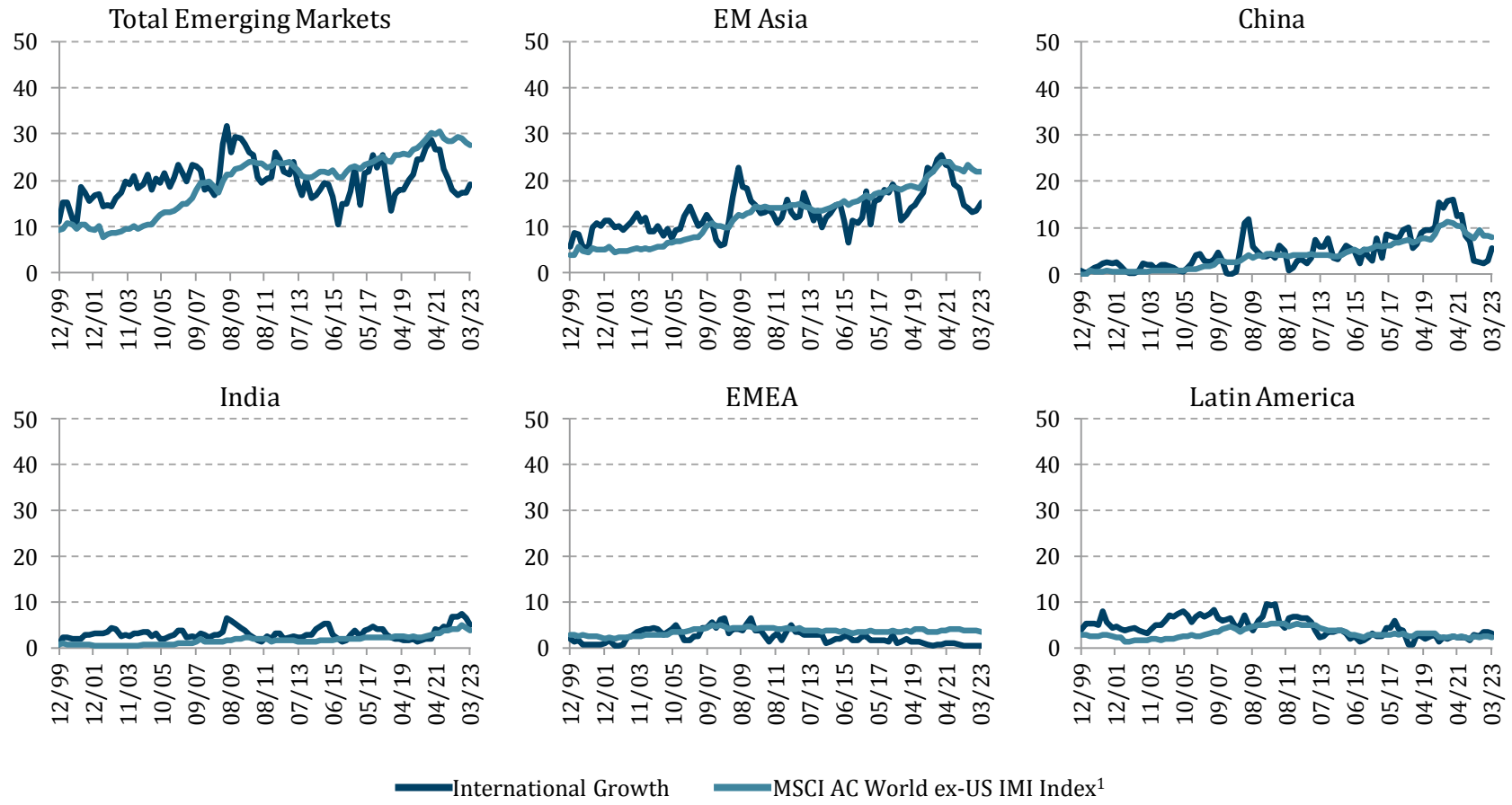


[1]Prior to March 31, 2003, benchmark data is taken from the MSCI AC World ex-US Index.
The data shown above is based on the strategy's representative portfolio. Geographic distribution is calculated by William Blair. Weights may vary over time as benchmark index weights shift. The index is comparable to the strategy in terms of investment approach but contains significantly more securities. Cash incorporates cash equivalents and accruals. Cash is a residual of the stock selection process.

Historical International Growth Regional Weightings

As of March 31, 2023

% of Portfolio

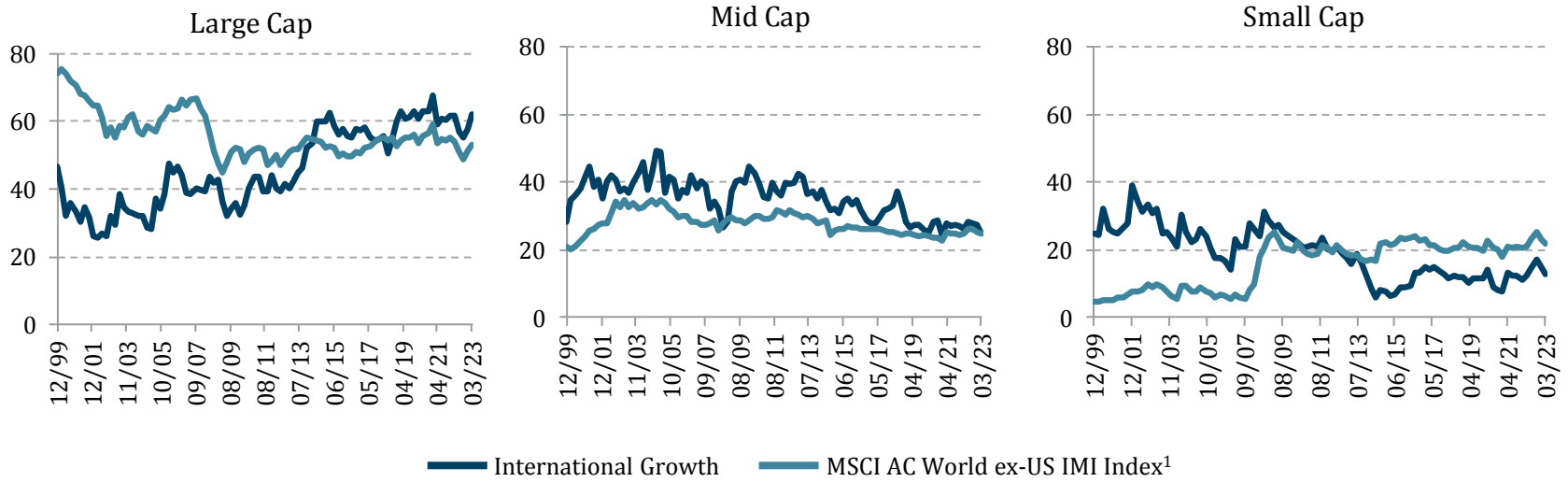


[1]Prior to March 31, 2003, benchmark data is taken from the MSCI AC World ex-US Index.
The data shown above is based on the strategy's representative portfolio. Geographic distribution is calculated by William Blair. Weights may vary over time as benchmark index weights shift. The index is comparable to the strategy in terms of investment approach but contains significantly more securities. Cash incorporates cash equivalents and accruals. Cash is a residual of the stock selection process.

Historical International Growth Market Cap Weightings

As of March 31, 2023

% of Portfolio



[1]Prior to March 31, 2003, benchmark data is taken from the MSCI AC World ex-US Index.
Beginning with 3Q 1998, market caps were defined by small, mid, and large caps as $1.5 billion, $1.5 billion to $10 billion, and over $10 billion, respectively. Beginning with 1Q 2004, these figures were adjusted to $2 billion, $2 billion to $12 billion, and over $12 billion. Beginning with 4Q 2007, these figures were adjusted to $3 billion, $3 billion to $15 billion, and over $15 billion. Beginning with 3Q 2014, these figures were adjusted to $4 billion, $4 billion to $15 billion, and over $15 billion. Beginning with 1Q2021, these figures were adjusted to $5 billion, $5 billion to $20 billion, and over $20 billion. The data shown above is based on the strategy's representative portfolio. Market capitalization distribution is calculated in Eagle by William Blair. Weights may vary over time as benchmark index weights shift. The index is comparable to the strategy in terms of investment approach but contains significantly more securities. Cash incorporates cash equivalents and accruals. Cash is a residual of the stock selection process.

Market Overview/Strategy

Photos courtesy of Vivian Lin Thurston and Andrew Siepker



London



Mumbai

Outlook

Growth

- US will likely be in a slowdown during the first half of the year
- European growth will likely remain a function of fossil fuel prices

Inflation

- Inflation in the US peaked in 4Q2022 and supply chains have largely normalized – nearing the end of central bank tightening in coming months
- Inflation should continue to moderate from 2022 peak, but likely remain above the historically low levels experienced during the last decade
- China re-opening and pent-up consumer demand will potentially make inflation sticker globally

US Banking Sector Turmoil Impact

- US banking sector turmoil could lead to further slowdown in economic activity and tighter credit conditions, which could potentially impact Fed rate decisions from here
- Severity or strength of headwinds depends on Fed balance sheet and net credit creation

Corporate Earnings

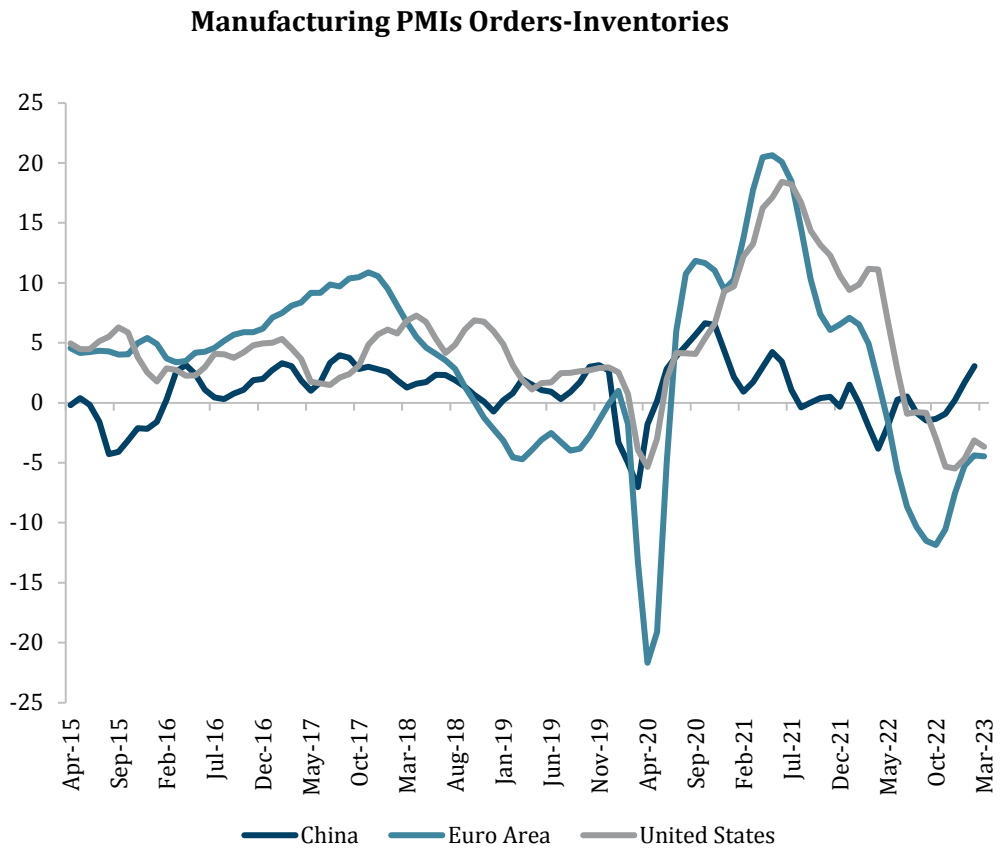
- Expectations for 2023 growth have continued to decline and currently sit at less than 2% growth for the year
- Market returns will likely be driven by earnings growth rather than valuation

Intermediate-Term Outlook

- In previous tightening cycles, inflation remains sticky, persisting up to two years, corporate earnings growth recedes, and valuation remains a dominant factor

Source: William Blair estimates. Information is subject to change without notice. Due to a variety of factors, actual events may differ significantly from the estimates or outlooks presented.

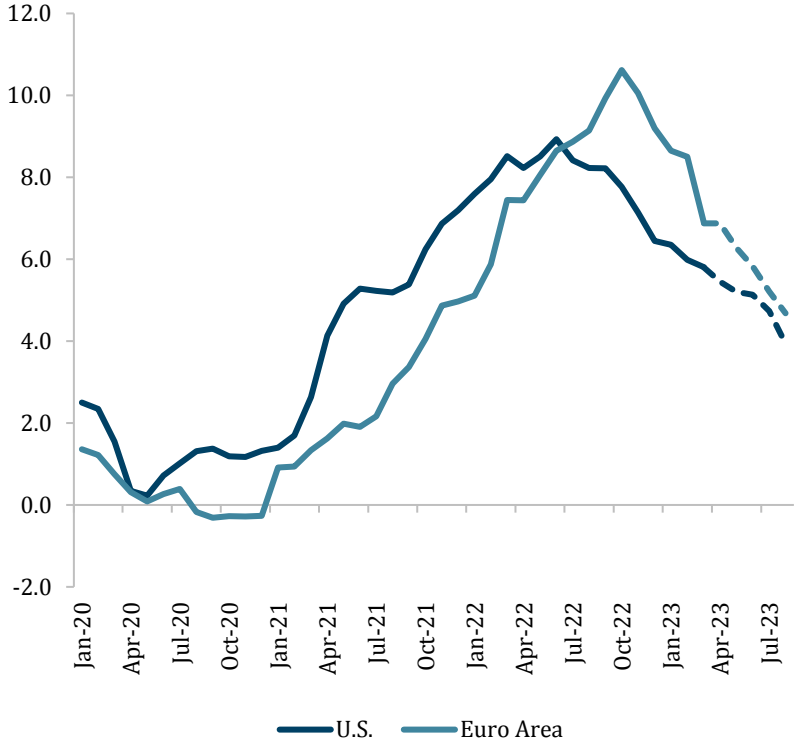
Growth



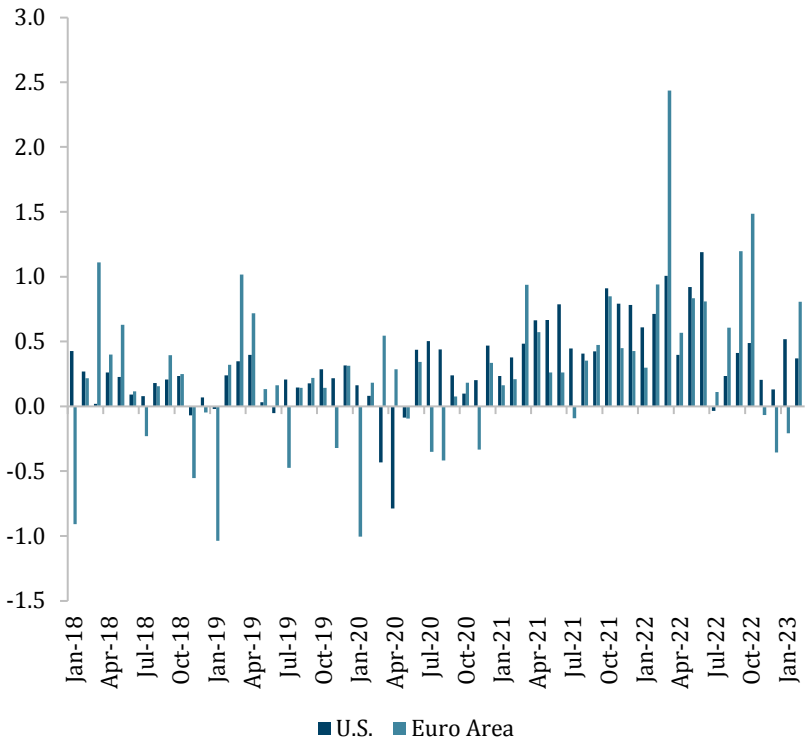
As of March 2023.
Source: IHS Markit.

Inflation

CPI, YoY % Change



CPI, MoM % Change

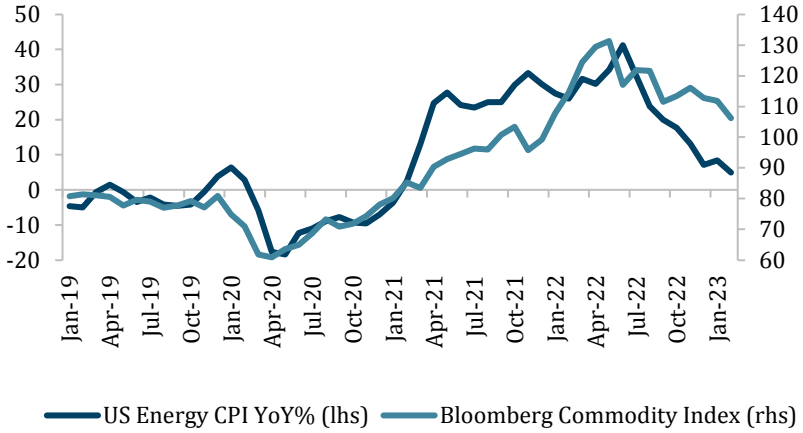


As of March 2023.

Source: BLS, Eurostat, William Blair estimates. Information is subject to change without notice. Forecasts are provided for illustrative purposes only and are not indicative of future results. Forecasts and projections are based on current beliefs and expectations. Due to a variety of factors, actual events may differ significantly from the estimates or outlooks presented. Forecasting directional change not actual values.

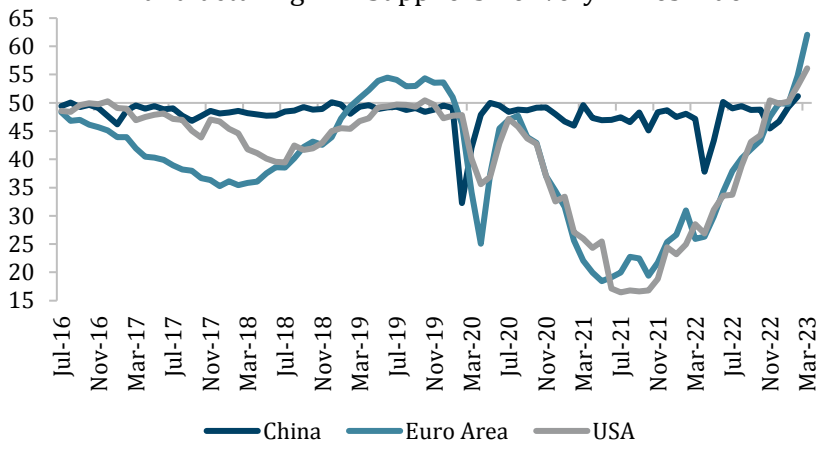
Prices Remain High, but Inflation Pressures are Easing

Energy Prices

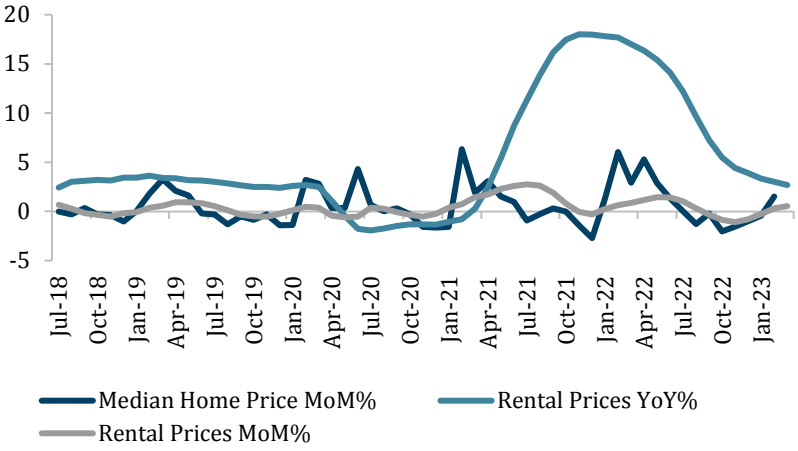


Goods

Manufacturing PMI Suppliers Delivery Times Index

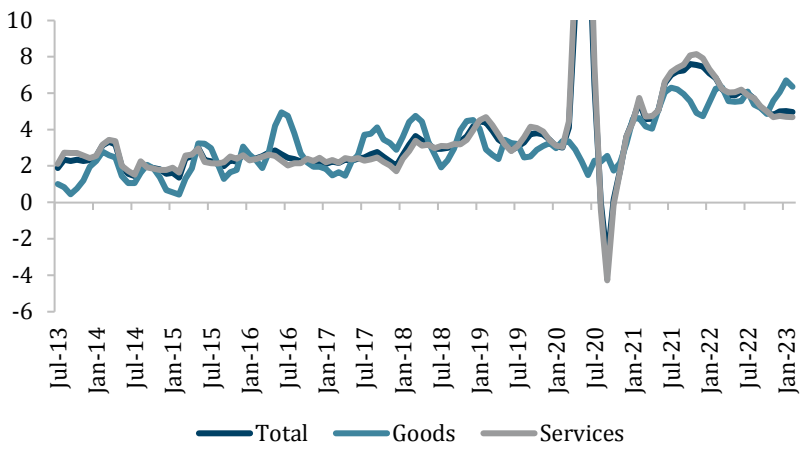


Housing



Services

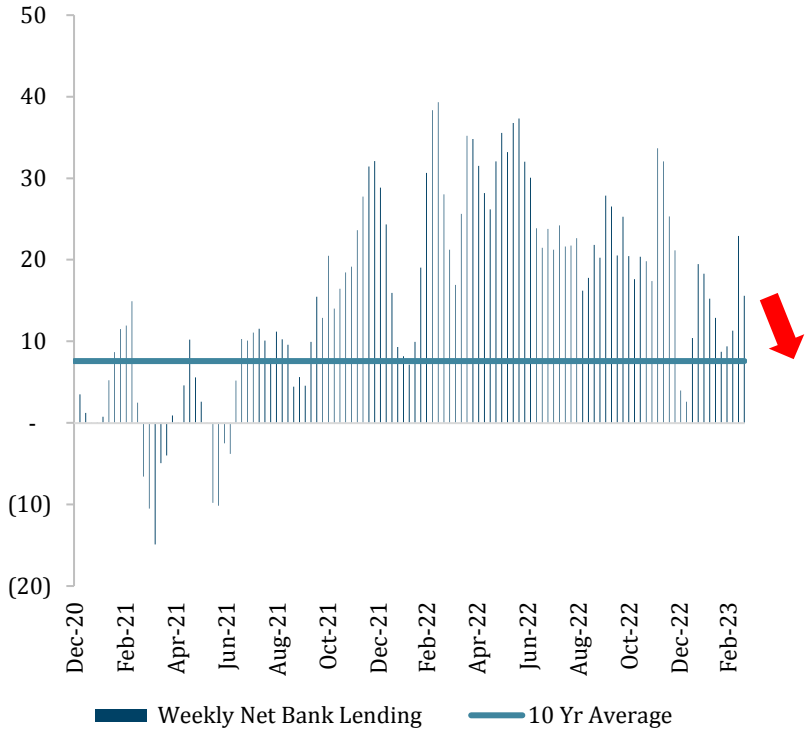
US Wages 3M/3M Annualized Growth



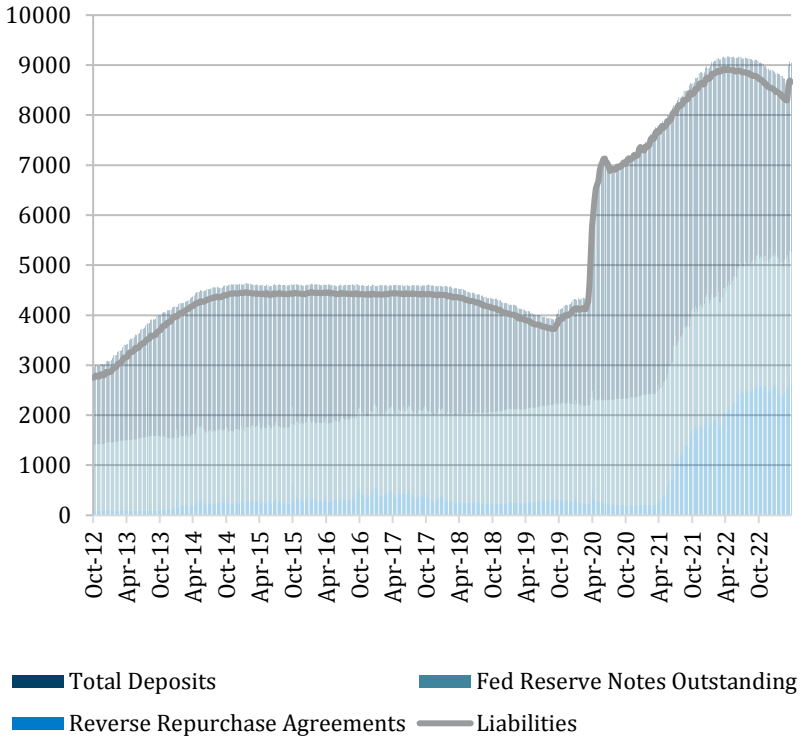
As of March 2023.
Source: BLS, Zillow, Apartment List, IHS Markit.

Credit Conditions Going Forward Depend on Fed Balance Sheet Expansion

Weekly Aggregate Change in Bank Lending ($bn)



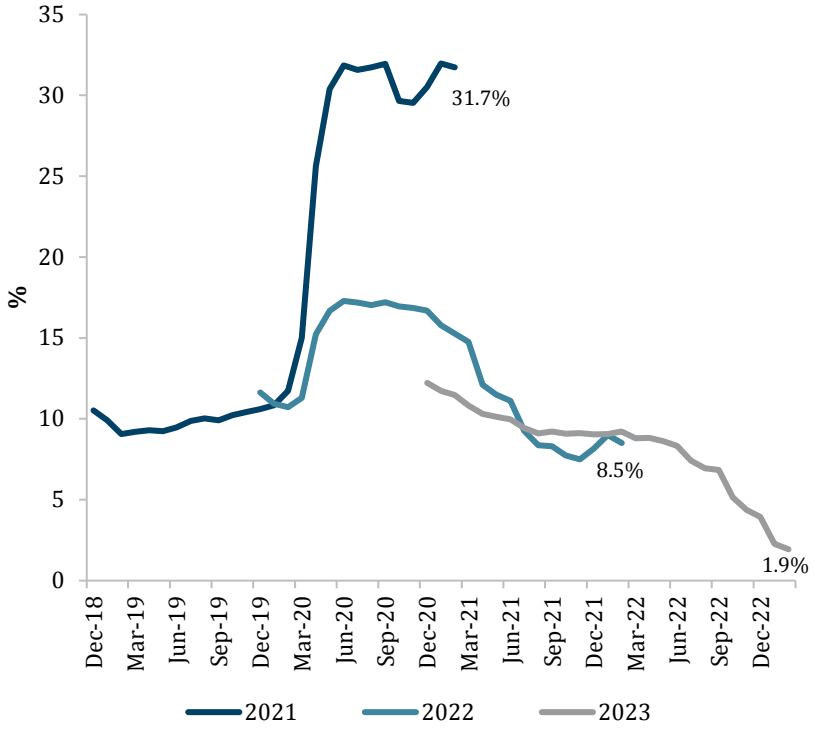
Fed Balance Sheet ($bn)



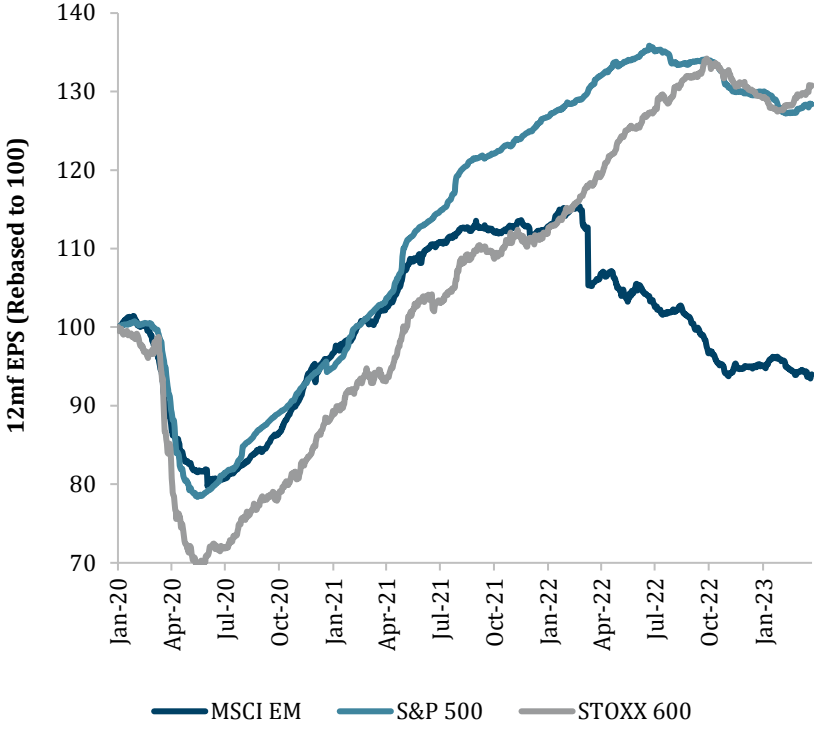
As of March 2023. Source: US Federal Reserve

Earnings

MSCI ACWI IMI EBIT Expectations (YoY % Change)

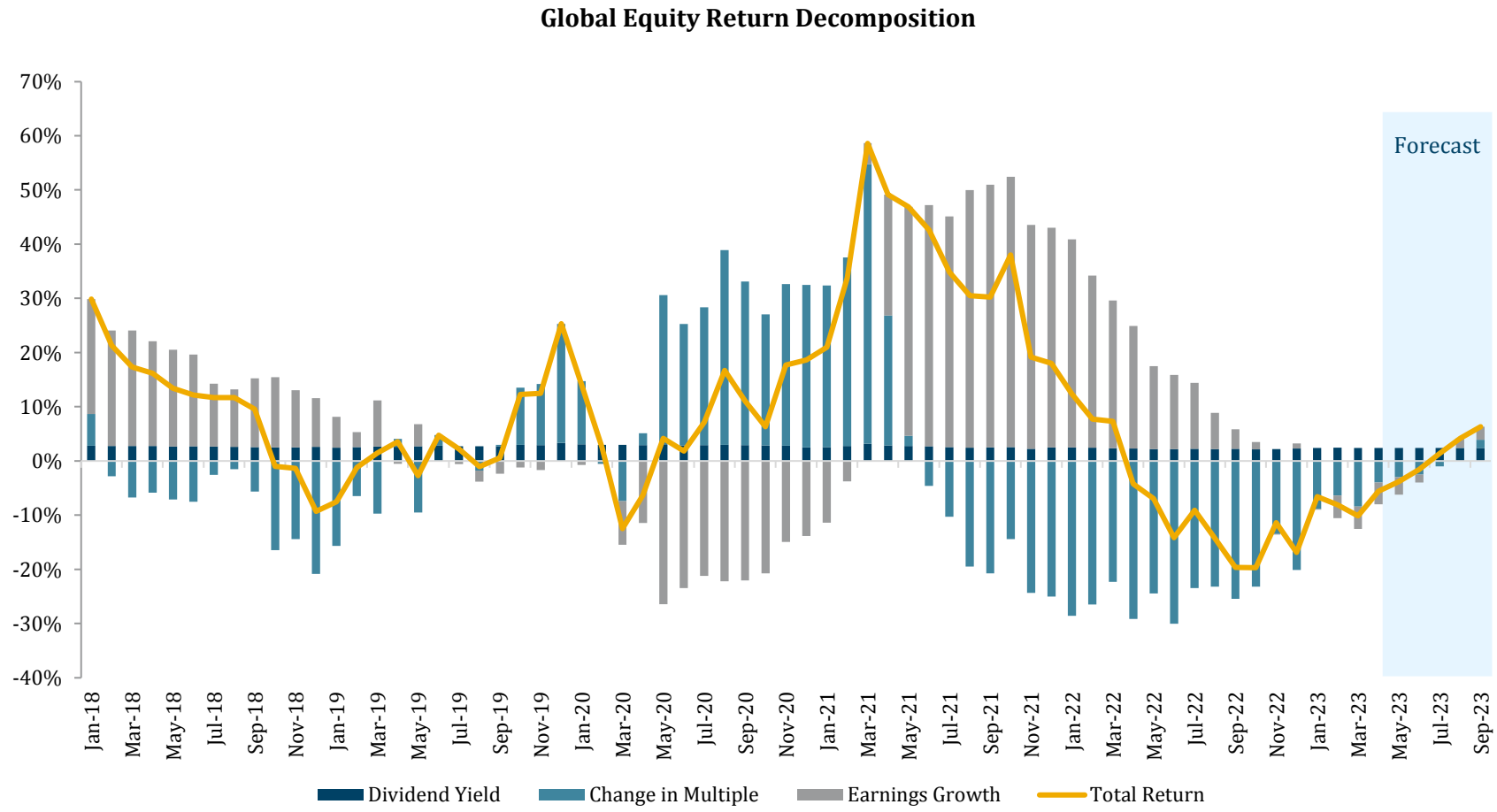


EPS Revisions for US, Europe and Emerging Markets



Data as of March 2023.
Source: MSCI, Morgan Stanley. A direct investment in an unmanaged index is not possible.

Corporate Earnings & Multiples

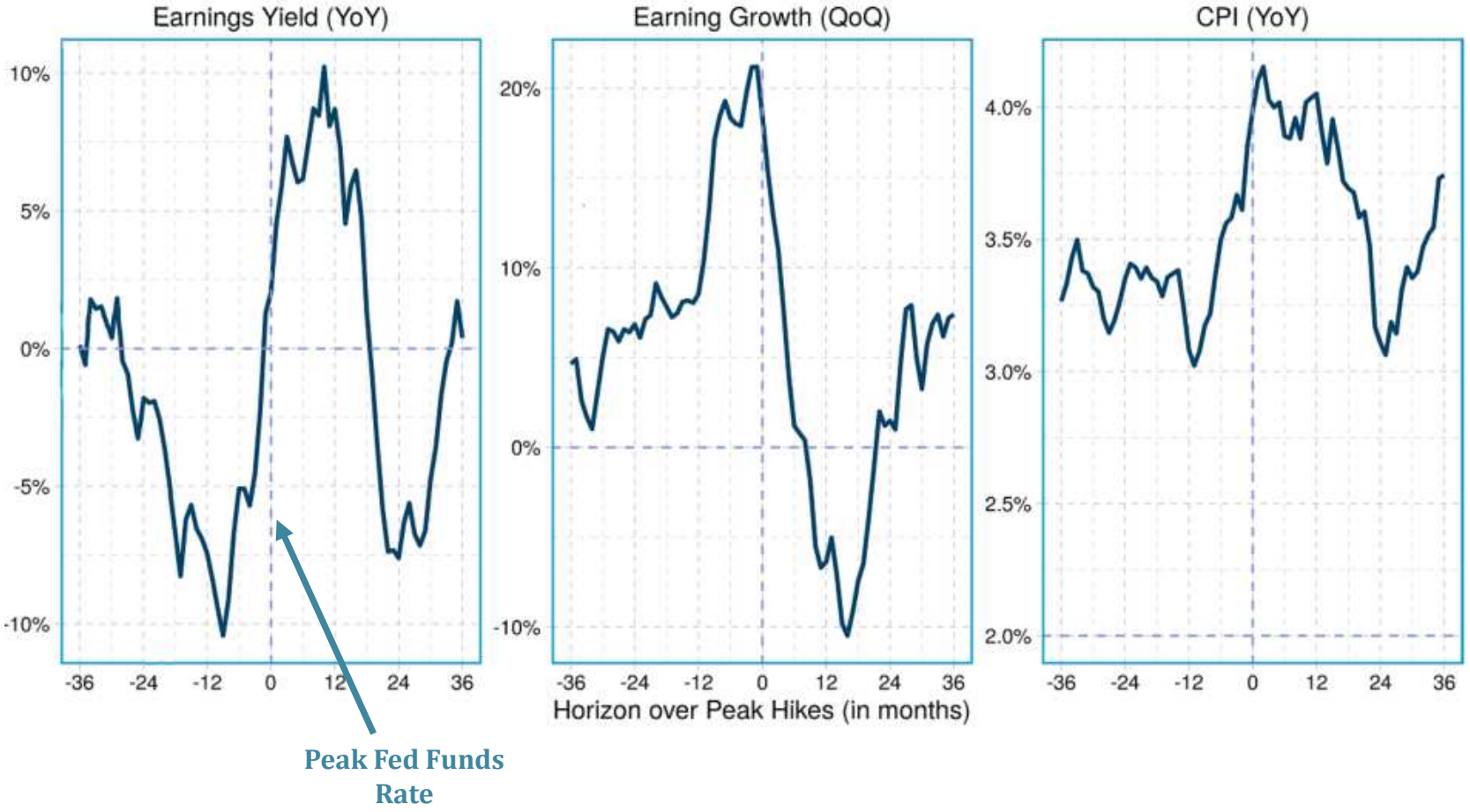


As of March 2023.

Source: William Blair estimates. Information is subject to change without notice. Forecasts are provided for illustrative purposes only and are not indicative of future results. Forecasts and projections are based on current beliefs and expectations. Due to a variety of factors, actual events may differ significantly from the estimates or outlooks presented. Forecasting directional change not actual values.

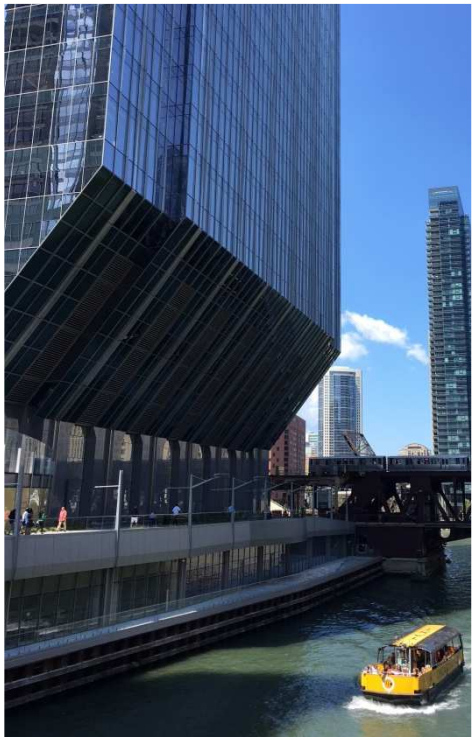
Intermediate-Term Outlook

In previous tightening cycles, inflation remains sticky, persisting up to two years, corporate earnings growth recedes, and valuation remains a dominant factor.



Data Source: FRED, federal reserve economic data; Online data Robert Shiller.
Notes: 1. Blue lines are the average number. 2. Periods for rate hike peaks: 1955-11-20: 152 bps' 1959-07-31: 279 bps; 1962-07-31: 154 bps; 1966-11-30: 166 bps; 1969-09-30: 337 bps; 1973-09-30: 591 bps; 1981-07-31: 1,001 bps; 1984-06-30: 208 bps; 1987-10-31: 144 bps; 1989-03-31: 327 bps; 1995-02-28: 267 bps; 2000-06-30: 177 bps; 2005-08-31:207 bps; 2018-11-30: 104 bps; 2022-11-30: 370 bps.

Appendix



Chicago



London



Zurich



Sydney

Investing in Our Communities

Deep philanthropic commitments across the globe

The mission of the William Blair Foundation is to inspire the next generation of philanthropists and actively invest in the communities where we live and work.

100% of our philanthropy is employee-inspired. We believe that investments in our community yield the greatest return.

We empower all employees to live the William Blair mission of *engaging in our communities.*











Sample Research Report

Recommendation Report

ABC Corporation (ABC DC)
Outperform
Vivian Lin Thurston
Date of Recommendation: 4/13/2015

Investment Management Research	
Rating	Outperform
	Leader
Symbol	ABC DC
Exchange	COPENHAGEN STOCK EXCHANGE
Headquarters	Denmark
Focus Country	Denmark
GICS Sector	Consumer Discretionary
GICS Industry	Textiles, Apparel & Luxury Goods

Global Quant Scores	
Composite	22
Quality	2
Valuation	85
Earnings Trend	18
Price Momentum	4
Volatility	29
[Scale: 1 = Best | 100 = Worst]	
Blair LTG Estimate	15.2%

Investment Conclusion (Last Modified: 10/21/2015)

What is the mix of long term characteristics, current fundamentals and thematic considerations that make the stock attractive? What is the case for sustaining or enhancing fundamental expectations and valuation? Are you currently recommending purchase or anticipating a development that would suggest a better opportunity is likely in the foreseeable future?

Business Activities and Segment Analysis (Last Modified: 10/21/2015)

Briefly describe the company's primary business units, products or end markets. Frame in terms of clarifying the mix of revenues and profits.

Financial/Trading Data	
Price (DKK)	760.00
Market Cap ($ mm)	95,514
Mkt Cap Float Adj ($ mm)	80,890.6
YTD % Change	52.8
Shares Outstanding (mm)	122.3
Dividend Yield (%)	1.2
3mo ADT Value ($ m	378.80
IM Holdings (USD)	

All report statistics are as of most recent close.

Estimate Summary			
GAAP		Street	Author
LTG	(DKK)	21.7	25.0
EPS	FYA(DKK)	24.70	9.32
	FY1	34.09	15.97
	FY2	46.91	20.53
	FY3	55.25	23.10
P/E	FYA	30.8	28.7
	FY1	22.3	16.8
	FY2	16.2	13.0
	FY3	13.8	11.6
REV	FYA(DKK)	11,942	6,652
	FY1	16,160	8,780
	FY2	18,909	9,936
	FY3	21,415	10,927

FYA Reported: 12/31/2014
Author Date: 11/25/2013

For illustrative purposes only.

Sample Research Report

Recommendation Report

ABC Corporation (ABC DC)
Outperform
Vivian Lin Thurston
Date of Recommendation: 4/13/2015

Investment Analysis

Qualitative Assessment: Management / Business Model (Last Modified: 10/21/2015)
Quality Model : 2

Evaluate the company relative to peers, competitors and general corporate standards - How strong is management and how durable is the business model? 1) Rate management on execution, control, strategy, continuity, culture and values, and stakeholder commitment. 2) Assess the strengths of the business model. Does the company have a sustainable competitive advantage? Proprietary products? Dominant or improving market share? Best-in-class cost structure? Unique asset base? 3) Review the company's financial performance - margins, returns, cash flow and balance sheet strength.

Decomposition of Long Term Growth Outlook (Last Modified: 10/21/2015)
Blair LTG Estimate (%) : 15.2

What is the likely range of earnings growth over the next 3-5 years? What is the composition of growth in terms of organic vs. acquired, price vs. volume, revenue vs. margin expansion? Are growth projections realistic or biased? Are there any issues that argue for a different growth metric other than EPS?

Current Fundamental Performance / Expectations (Last Modified: 10/21/2015)
ETrend Model : 18

Assess current growth trends in the context of valuation and long term expectations. What is the direction of forecasts? Are operating and reporting earnings in line? How predictable are near term earnings? If current and expected growth is below the long term nor, what are the prospects for improvement?

Valuation (Last Modified: 10/21/2015)
Valuation Model : 85

Assess valuation relative to market expectations considering future growth, incremental returns, historic and comparable norms. What are the valuation variables (cyclicality, risk)? What is or may be changing to drive a re-rating- growth potential, profitability, risk, competition, management?

Governance / Environmental / Social Considerations (Last Modified: 10/21/2015)
GMI Global: B GMI Home: C GMI Sector: B
MSCI IVA Rating: AA Goldman Sachs ESG Rating: -

Highlight any overall conclusions or concerns.

Governance Considerations (Last Modified: 10/21/2015)
GMI Global: B GMI Home: C GMI Sector: B

The key focus is on transparency, oversight, shareholder value creation, accounting policies. Does the company practice good governance? How are executives compensated? Is it in line with shareholder interests and executive performance? Are there concerns about alignment of interests between management and outside shareholders (particularly when the company is closely held)? Is the board focused on shareholder interests and is it accountable? Is there an independent audit function and, if so, has it found significant issues? Does it report on these issues for shareholders? How conservative/aggressive are accounting practices?

Environmental Considerations (Last Modified: 10/21/2015)
GMI Global: A GMI Home: B GMI Sector: B

The key focus is on resource management, product innovation, renewable energy/water use, reporting. Is this relevant? What is the company's environment reporting / disclosure? Does it use resources effectively and minimize impact of operations? Have there been any past environmental issues? Any areas of concern?

Social Considerations (Last Modified: 10/21/2015)
GMI Global: C GMI Home: C GMI Sector: C

For illustrative purposes only.

Sample Research Report

Recommendation Report

ABC Corporation (ABC DC)
Outperform
Vivian Lin Thurston
Date of Recommendation: 4/13/2015

The key focus is on human rights at the company and the supply chain, labor/management relations, product/workplace safety and community relations. What is the relationship between labor and management? Are there any other areas of concern here, including the company's history and policy supporting human rights, workplace safety, product safety, community relations, resource use, or specific political risks?

Accounting / Disclosure / Transparency (Last Modified: 10/21/2015)

How does the company rate on these issues? Any concerns about corporate structure, shareholder rights, compensation, hidden risks, information flow, board of directors?

Thematic Issues / Risks (Last Modified: 10/21/2015)

What market trends or sector issues are reflected in the company's risk/reward picture? What exogenous developments might affect the fundamentals or valuation?

Key Metrics / Events / Catalysts (Last Modified: 10/21/2015)

Any identifiable milestones, events or conditions that may provide feedback on the stock's prospects?

Contact With Management (Last Modified: 10/21/2015)

Highlight any recent interactions with management. How well do we know this management team?

For illustrative purposes only.

Sample Research Report

Quant Model Factors

Focus Country	Denmark	Eligibility List	Yes	ABC Corporation (ABC DC)
GICS Sector	Consumer Discretionary	Research Agenda	No	Outperform
GICS Industry	Textiles, Apparel & Luxury Goods	IM Hldgs (USD) (as of)		Vivian Lin Thurston
GICS Industry Group	Consumer Durables & Apparel	Market Cap (USD mm)	95,514.00	4/13/2015

Composite Model	Value	Percentile	Ind Rel
COMPOSITE MODEL SCORE	-	22	-

Quality Model	Value	Percentile	Ind Rel
QUALITY MODEL SCORE	-	2	1
Sustainable Value Creation	-	*1*	*1*
Cash Flow ROIC	47.2	3	2
Cash Flow ROIC 3 Year Avg	44.3	3	2
ROE LTM (Financials Only)	-	-	-
Productivity Factor (ex. Financials, Ind Rel)	-	2	2
Oper ROA 5 yr Avg (%)	31.3	2	4
ROE 5yr Avg (%)	44.1	3	2
FCF Margin 3 Year Avg (ex Financials, Ind Grp Rel)	25.0	3	4
Gross Profit / Assets (ex Financials, Ind Grp Rel)	84.3	5	5
EVA Margin (Ind Grp Rel)	22.7	2	2
Earnings Quality	-	*49*	*33*
Balance Sheet Accruals Component	52	46	32
Cash Flow Accruals	6.9	62	42
NTM EPS Standard Error 3 Year Average	2.2	31	21
Financial Strength	-	*21*	*16*
Altman Z-Score (Ind Grp Rel)	6.8	4	2
Merton Distance to Default (Ind Grp Rel - Higher is better)	12.2	25	11
Net Debt / EBITDA (ex Financials, Ind Grp Rel)	.1	49	38
Banks Only	-	-	-
Tangible Equity to Assets	-	-	-
NPL to Loans	-	-	-
Cost Income Ratio	-	-	-
Risk Adjusted Income	-	-	-
Loans to Deposits	-	-	-
Tier 1 Factor	-	-	-
Pretax Income plus Loan Loss Reserves/Market Cap	-	-	-
1 Year Change in Loan Loss Reserves/Assets	-	-	-

Valuation	Value	Percentile	Ind Rel
VALUATION MODEL SCORE	-	85	71
Earnings / Cash Flow Based Factors	-	*85*	*70*
Free Cash Flow Yield (ex Financials)	3.4	50	40
Enterprise Value / EBITDA (ex Financials)	18.8	86	74
Dividend Yield	1.2	80	68
Cash Flow Yield Rel to 3 yr Avg (ex Financials)	70.2	80	63
Price / NTM Earnings	17.0	56	51
Asset-Based Factors	-	*100*	*99*
Enterprise Value / Sales (Ind Rel, ex Financials)	6.9	93	94
Price to Tangible Book	108.6	100	98
Enterprise Value / Invested Capital	12.8	99	97
Model-Based Factors	-	*52*	*38*
EVA PRVit	60	39	30
StarMine Intrinsic Value (IV) Model	1.0	71	53
StarMine Ind Rel Valuation	-	75	74
AFG Percent to Target Current	92.1	11	5

Earnings Trend Model	Value	Percentile	Ind Rel
EARNINGS TREND MODEL SCORE	-	18	9
Earnings Revisions	-	*15*	*9*
StarMine ARM	80	21	13
3M EPS FY1 Revisions / Book Value per Share 3M Ago	.7	9	6
3M EPS FY2 Revisions / Book Value per Share 3M Ago	.2	17	11
EPS Est Rev Breadth 1 month (%)	.0	38	26
Momentum	-	*47*	*32*
EVA Momentum	7.4	9	1
Quality Momentum (6M Change in Percentile)	-1	61	44
FY0 - FY5 Growth Momentum (6M Change in Growth Rate)	2.1	19	13
3M Change in 3M Revision (FY1 and FY2 Avg)	-2.4	92	90
Earnings Surprise	-	*42*	*35*
Standardized Unexpected Earnings (SUE)	.3	46	38
StarMine Predicted Surprise	.5	31	14

For illustrative purposes only.

Sample Research Report

Quant Model Factors

ABC Corporation (ABC DC)
Outperform
Vivian Lin Thurston
4/13/2015

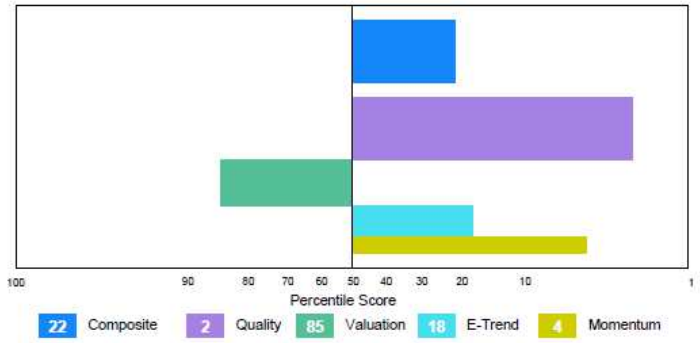
Focus Country	Denmark	Eligibility List	Yes
GICS Sector	Consumer Discretionary	Research Agenda	No
GICS Industry	Textiles, Apparel & Luxury Goods	IM Hldgs (USD) (as of)	
GICS Industry Group	Consumer Durables & Apparel	Market Cap (USD mm)	95,514.00

Momentum Model	Value	Percentile	Ind Rel
MOMENTUM MODEL SCORE	-	4	5
12 Month Volatility Adjusted Return	39.4	5	7
6 Month Sharpe Ratio	1.6	4	6
Industry Group Percentage of 1 Year Range	.5	34	32
6 Month Region - Sector Volatility Adjusted Return	-6.7	49	36
9 Month Sharpe Ratio	2.0	4	6

Growth Model (%)	Value	Percentile	Ind Rel
Blair LTG Estimate	15.2	-	-
Historical Growth	19.0	-	-
6 Year Avg Trend Growth (FY-2 to FY+3)	19.6	-	-
10 Year Avg Trend Growth (FY-6 to FY +3)	8.3	-	-
FY0 to FY+5 Expected Growth Trend	15.9	-	-
FY+1 to FY+5 Expected Growth Trend	12.2	-	-
IBES Consensus LTG Estimate (for display only)	*21.7*	-	-

Volatility Model	Value	Percentile	Ind Rel
VOLATILITY MODEL SCORE	-	29	-
ROE Range/Avg	-	41	-
Operating Margin Range/Avg	-	16	-
CF ROIC Range/Avg	-	35	-
EPS FY1 Coefficient of Variation	-	23	-
EPS FY2 Coefficient of Variation	-	55	-
EPS FY1 Dispersion	-	51	-
EPS FY2 Dispersion	-	26	-

Model History (GICS Industry)	Short Term	Long Term
Composite	★★★★★★★	★★★★★★★
Quality	★	★★★★★★★
Valuation	★★	★★
Earnings Trend	★★★★★★	★★★★★
Momentum	★★★★★	★★★★
Growth	★★★★	★



For illustrative purposes only.

Biographies – Global Investment Team

Portfolio Management



Alaina Anderson, CFA
Partner

Alaina Anderson, CFA, partner, is a portfolio manager for the International Leaders and International Leaders ADR strategies.

Previously, she was a global research analyst covering real-estate, utilities, and engineering companies. Before joining William Blair in 2006, she was a senior analyst in the investments department of the MacArthur Foundation, where she provided research support for internally managed portfolios and was involved in investment manager due diligence, selection, and monitoring for the foundation's U.S., non-U.S., and hedge-fund portfolios. Before joining the MacArthur Foundation, Alaina was an investor relations consultant with Ashton Partners and a financial advisor with UBS Painewebber. She is a fellow of Leadership Greater Chicago, a board member of the North Lawndale Employment Network, and a member of the CFA Institute and the CFA Society Chicago.

Education: B.S., Wharton School at the University of Pennsylvania; M.B.A., University of Chicago's Booth School of Business



Simon Fennell
Partner

Simon Fennell, partner, is a portfolio manager for William Blair's International Growth, International Small Cap Growth, and International Leaders strategies.

He joined William Blair in 2011 as a technology, media, and telecommunications research analyst focusing on idea generation and strategy more broadly. Before joining William Blair, Simon was a managing director in the equities division at Goldman Sachs in London and Boston, responsible for institutional equity research coverage for European and international stocks. Previously, Simon was in the corporate finance group at Lehman Brothers in London and Hong Kong, working in the M&A and debt capital markets groups.

M.A., University of Edinburgh; M.B.A., Cornell University's Samuel Curtis Johnson Graduate School of Management



Kenneth J. McAtamney
Partner

Ken McAtamney, partner, is the head of the global equity team and a portfolio manager for William Blair's International Growth, Global Leaders, International Leaders, and Emerging Markets Leaders strategies.

Ken is also a member of the Investment Management leadership team. He was previously co-director of research and a mid-large-cap industrials and healthcare analyst. Before joining William Blair in 2005, Ken was a vice president at Goldman Sachs and Co., where he was responsible for institutional equity research coverage for both international and U.S. equity. Before that, he was a corporate banking officer with NBD Bank.

B.A., Michigan State University; M.B.A., Indiana University



Todd M. McClone, CFA
Partner

Todd McClone, CFA, partner, is a portfolio manager for William Blair's emerging markets strategies, including Emerging Markets Leaders, Emerging Markets Growth, Emerging Markets Small Cap Growth, and Emerging Markets ex China Growth.

Before joining the firm in 2000, he was a senior research analyst specializing in international equity for Strong Capital Management. Previously, he was a corporate finance research analyst with Piper Jaffray, where he worked with the corporate banking financials team on a variety of transactions, including initial public offerings, mergers and acquisitions, and subordinated debt offerings. He also issued fairness opinions and conducted private company valuations.

B.B.A. and B.A., University of Wisconsin–Madison

Biographies – Global Investment Team

Portfolio Management



D.J. Neiman, CFA
Partner

D.J. Neiman, CFA, partner, is a portfolio manager for the International Small Cap Growth and Emerging Markets Small Cap Growth strategies. Before becoming a portfolio manager, D.J. was a global research analyst covering small-cap financial stocks.

Before joining Investment Management in 2009, D.J. was an analyst in the firm's sell-side research group, covering the financials sector with a focus on the asset-management and advisory investment-banking industries. Previously, D.J. was a senior accountant with William Blair Funds and a fund analyst at Scudder Kemper Investments. He is a member of the CFA Institute and the CFA Society Chicago.



Casey K. Preyss, CFA
Partner

Casey Preyss, CFA, partner, is a portfolio manager for William Blair's Emerging Markets Growth, Emerging Markets Small Cap Growth, China A-Shares Growth, China Growth, and Emerging Markets ex China Growth strategies.

Since joining William Blair in 2000, he has been a research analyst covering industrials, IT, and resources stocks. Before taking on fundamental research responsibilities for William Blair's global equity team, Casey was a quantitative analyst. Before joining the firm, he was an international equity research sales associate with Thomas White International.



Hugo Scott-Gall
Partner

Hugo Scott-Gall, partner, is a portfolio manager for the Global Leaders and Emerging Markets Leaders strategies, and Co-Director of Research for the Global Equity team.

Before joining William Blair in 2018, Hugo was a managing director and head of the thematic research team at Goldman Sachs. In that role, he managed a global team of approximately 15 people who investigated thematic changes, analyzed their effects across industries, and sought to identify long-term structurally advantaged companies. He and his team produced Fortnightly Thoughts, a publication offering thematic insights across sectors, and GS Sustain, a long-term-focused publication that sought to find best-in-breed companies, with environmental, social, and governance (ESG) analysis forming an integral part of the process. He also oversaw GS Dataworks, a team that used alternative data to augment fundamental research. Before his move into thematic research, Hugo was an equity research analyst covering European transportation companies. Before joining Goldman Sachs, he was an equity research analyst at Fidelity Investments.



Andrew J. Siepker, CFA
Partner

Andy Siepker, CFA, partner, is a portfolio manager for the International Growth strategy.

Previously, he was an equity research analyst covering large-cap industrial companies. Before that, Andy worked as a research analyst conducting non-U.S. consumer research and served on William Blair's sell-side as a research associate, focusing on e-commerce and hardline retailers. Before joining William Blair in 2006, Andy was a financial analyst in a finance training program at First Data Corporation. He is a member of the CFA Institute and the CFA Society Chicago.

Education:	B.S., Miami University; M.B.A., with high distinction, University of Michigan's Ross School of Business	B.S.B.A., The Ohio State University; M.B.A., University of Chicago's Booth School of Business		B.S., finance, with highest distinction, University of Nebraska

Biographies – Global Investment Team

Portfolio Management



Vivian Lin Thurston, CFA
Partner

Vivian Lin Thurston, CFA, partner, is a portfolio manager for William Blair's Emerging Markets Growth, China A-Shares Growth, China Growth, and Emerging Markets ex China Growth strategies. Previously, she was a global equity research analyst covering the China A-shares market and large-cap consumer companies.

Before joining William Blair, Vivian was vice president and consumer sector head at Calamos Investments. Before that, she was an executive director and senior investment analyst at UBS Global Asset Management/Brinson Partners, where she was responsible for stock selection and research for consumer sectors in the United States and emerging markets. Vivian also held roles at Mesirow Financial, China Agribusiness Development Trust and Investment Corporation, and Vanke. She is a member of the CFA Institute and the CFA Society Chicago. She is also the founder and chairman of the board of the Chinese Finance Association of America, a 501(c) nonprofit organization.

Education: LL.B., sociology, Peking University; M.A., sociology and M.S., finance, University of Illinois Urbana-Champaign

Biographies – Global Investment Team

Portfolio Specialists



Ryan Dimas, CFA, CAIA
Partner

Ryan Dimas, CFA, CAIA, partner, is a portfolio specialist for William Blair's global equity strategies.

In this role, Ryan participates in the team's decision-making meetings, conducts portfolio analysis, and is responsible for communicating portfolio structure and outlook to clients, consultants, and prospects. Previously, for 17 years, Ryan led the investment manager research effort for William Blair Select, a team that was responsible for the selection and ongoing evaluation of third-party investment managers. In 2016, Ryan was named chief investment strategist and chair of the asset allocation investment committee for investment counseling, where he worked closely with investment counseling teams on strategic and tactical recommendations that were implemented within portfolios. He is a member of the CFA Society Chicago and a CAIA charterholder.

Education: B.A., finance, Arizona State University



Kyle Concannon, CFA, CAIA

Kyle Concannon, CFA, CAIA, is a portfolio specialist for William Blair's global equity strategies.

In this role, he participates in the team's decision-making meetings, conducts portfolio analysis, and is responsible for communicating portfolio information to clients, consultants, and prospects. Previously, Kyle was an investment strategist on William Blair's Dynamic Allocation Strategies team where he contributed to portfolio management and was responsible for communicating the team's philosophy and process, portfolio positioning, and performance drivers to internal and external stakeholders. Before joining William Blair in 2015, Kyle spent eight years at UBS Global Asset Management, most recently as part of its global investment solutions team, where he was responsible for interacting with clients and prospects regarding the firm's multi-asset capabilities. Kyle is a member of the CFA Institute, the CFA Society Chicago, and the CAIA Association.

B.S., finance, Boston College



Emily George

Emily George is a portfolio specialist for William Blair's global equity strategies.

In this role, Emily conducts portfolio analysis and is responsible for communicating portfolio structure and outlook to clients, consultants, and prospects. Before joining the firm in 2011, Emily was a financial planning assistant for a private financial services company in Cleveland, Ohio.

B.A., political science and economics, College of Wooster



Romina Graiver
Partner

Romina Graiver, partner, is a portfolio specialist for William Blair's global equity strategies.

In this role, she participates in the team's decision-making meetings, conducts portfolio analysis, and is responsible for communicating portfolio structure and outlook to clients, consultants, and prospects. She is a member of the ESG leadership team for William Blair Investment Management and Global Inclusion Council. Previously at William Blair, she was a senior client relationship manager. Before joining William Blair in 2012, Romina was deputy head of the international equity investment team at BNP Paribas Investment Partners, where she was responsible for product development and investor communication. Before taking on that role, she was a product specialist for model-driven equity investments and a marketing manager. She holds the CFA UK Certificate in ESG Investing.

B.Sc., international business and an M.Sc., economics, University of Pantheon-Sorbonne, Paris, France

Biographies – Global Investment Team

Portfolio Specialists



Jeremy Murden, CAIA

Jeremy Murden, CAIA, is a portfolio specialist for William Blair's global equity strategies.

In this role, Jeremy conducts portfolio analysis, participates in the team's decision-making meetings, and communicates portfolio structure and outlook to clients, consultants, and prospects. Before joining William Blair as a portfolio specialist, Jeremy was a portfolio strategist at Matthews Asia, where he provided macro thought leadership and individual portfolio insights focused on the firm's China and Asia equity strategies. Before joining Matthews Asia, Jeremy spent 10 years as a senior investment manager analyst for William Blair Select, leading external equity manager coverage for the team that was responsible for the selection and ongoing evaluation of third-party investment managers. He started his career in distribution as a product specialist at Claymore Securities, now Guggenheim Funds. He holds the Chartered Alternative Investment Analyst designation.

Education: B.Sc. in finance honors, DePaul University; M.B.A., University of Chicago Booth School of Business

Biographies – Global Investment Team

Research



William Benton, CFA, CPA
Partner

William Benton, CFA, CPA, partner, is a global equity research analyst and is co-director of research for the Global Equity team. He covers large-cap consumer/communication services companies. Previously, William covered mid- and large-cap technology, media, and communication services companies.

Before joining William Blair Investment Management in 2007, he was a technology research analyst with the firm's sell-side research group for 10 years. In this position, William was twice named "Best on the Street" in The Wall Street Journal's annual analyst survey. Before joining William Blair in 1997, he worked at SBC Warburg, U.S. Cellular, May Company, and Monsanto. William is a member of the CFA Society Chicago and holds the CMA designation.



Drew Buckley, CFA, CPA
Partner

Drew Buckley, CFA, CPA, partner, is a global equity research analyst. He covers small-cap technology, media, and communication services companies.

Before joining William Blair in 2008 as a global research associate focused on technology, media, and telecommunications stocks, he spent two years as a senior associate in Ernst & Young LLP's investment management assurance practice. Drew is a member of the CFA Society Chicago.



Monika Budyn

Monika Budyn is a global equity research analyst covering large-cap industrial companies.

Previously, she was an associate analyst on the industrial, energy, and materials sector team and a portfolio associate on the international trading desk. Before joining William Blair in 2013, Monika was a portfolio administrator on the U.S. equities team at UBS Global Asset Management.



Anil Daka, CFA
Partner

Anil Daka, CFA, partner, is a global equity research analyst. He covers small-mid cap Industrials companies.

Before joining the firm in 2011, Anil was an equity analyst at Morningstar, where he was responsible for equity research coverage in the global industrials sector. He is a member of the CFA Institute and the CFA Society Chicago.

Education:	B.S., finance, University of Illinois Urbana-Champaign; M.B.A., Dartmouth College's Amos Tuck School of Business Administration, where he was a Tuck Scholar	B.S., business, University of Colorado–Boulder	B.S., finance, University of Illinois Chicago; M.B.A, Chicago's Booth School of Business	B.Tech., metallurgical engineering, Indian Institute of Technology; M.B.A. from the University of North Carolina

Biographies – Global Investment Team

Research



Adam Dettmer, CFA, CPA

Adam Dettmer, CFA, is a global equity research analyst covering small- to mid-cap consumer companies.

Before joining William Blair in 2018, Adam was an equity research associate with Oppenheimer & Co. He also worked in the federal government practice at Deloitte Financial Advisory Services. Adam is a CFA charterholder.



Daria Fomina

Daria Fomina is a global equity research analyst. She covers large-cap consumer companies.

Before joining William Blair, Daria was head of the Pan-European leisure research team at Goldman Sachs Global Investment Research in London. In this role, she covered European hospitality, gaming, and services companies. Before that, Daria covered Central and Eastern European, Middle Eastern, and African technology, media, and telecommunications (TMT) companies in the sell-side research group at Goldman Sachs. Before joining Goldman Sachs in 2009, she worked at PWC.



Esteban Gonzalez Rosell

Esteban Gonzalez Rosell is a global equity research analyst covering small-cap financials and real estate.

Before joining William Blair, he was a portfolio manager, trader, and research analyst for Intercorp Financial Services.



Gurvir Grewal

Gurvir Grewal is a U.S. generalist analyst on William Blair's global equity team.

Before joining the firm, Gurvir was a quantitative analyst at QMC, a Dubai-based quantitative hedge fund. Before that, he was an emerging markets equities trader at Morgan Stanley in London.

Education:	B.B.A., summa cum laude, finance and accounting, The College of William and Mary; M.B.A., University of Chicago's Booth School of Business	Bachelor's degree, economics (with honors) and Master's degree, financial markets, Higher School of Economics	B.S., Universidad del Pacifico in Peru; M.B.A., Wharton School at the University of Pennsylvania	MEng in EEM (engineering, economics, and management), with first-class honors, University of Oxford. There, he focused on machine learning, signal processing, and optimization.

Biographies – Global Investment Team

Research



Daniel Hill, CFA

Daniel Hill, CFA, is a global equity research analyst at William Blair Investment Management. He covers large-cap financial companies and real estate.

Daniel was previously a small-cap financials analyst, global generalist research analyst and an international and global research associate supporting the global financial team under the guidance of research analysts. He joined William Blair in 2005 as an investment accountant. Daniel is a member of the CFA Institute and the CFA Society Chicago.

Education: B.S., finance, University of Nebraska; M.B.A. from Northwestern University's Kellogg Graduate School of Management



Jayesh Kannan, CFA

Jayesh Kannan, CFA, is a global equity research analyst. He covers small-cap technology, media, and communication services companies.

Before joining William Blair in 2018, Jayesh was an associate in the institutional equities division at Morgan Stanley in New York City and Singapore. In this role, he focused on emerging market and Asian equities. Jayesh is a member of the CFA Institute and the CFA Society Chicago and has previously contributed to the Financial Times.

Education: B.E., computer engineering, Nanyang Technological University, Singapore, was a Singapore Airlines-Neptune Orient Lines scholar and graduated with first-class honors; M.B.A., Massachusetts Institute of Technology (MIT) Sloan School of Management, graduated as a Martin Trust Community Fellow



Benjamin Loss, CFA

Benjamin Loss, CFA, is a global equity research analyst. He covers energy and materials companies.

Before joining William Blair in 2011 as a global research associate focused on energy and materials, Benjamin was a sell-side research associate at Morgan Keegan. He is a member of the CFA Institute and the CFA Society Chicago.

Education: B.S., accounting, summa cum laude, University of Maine; M.S., finance, Vanderbilt University



Michael Patchen, CFA

Michael Patchen, CFA, is a global equity research analyst. He covers small- and mid-cap consumer companies.

Before joining William Blair, Michael worked as a summer research associate in the TMT group at Credit Suisse, a financial manager at American Express, and a regulatory risk analyst at Morgan Stanley.

Education: B.S., risk management and minor in international business, The Penn State University; M.B.A., Massachusetts Institute of Technology's Sloan School of Management

Biographies – Global Investment Team

Research



Richard Reznick, Ph.D.

Richard Reznick, Ph.D., is a global equity research analyst. In this role, he covers small-cap healthcare companies, including those in China.

Before joining William Blair in 2010 as an equity research associate focused primarily on the biotechnology sector, Richard was a product specialist in Abbott Laboratories' diagnostics division.

Education: B.S., biology, University of Illinois at Urbana-Champaign; Ph.D., biology, Yale University



Greg Scolaro, CFA, CPA

Greg Scolaro, CFA, CPA, is a global equity research analyst. He covers large cap technology, media, and communication services companies.

Previously, he covered small-cap emerging markets companies. Before that, he was a research associate covering global technology, media, and telecommunications stocks. Before joining the firm in 2014, Greg was an auditor in the technology sector at KPMG Chicago. He is a member of the CFA Institute and the CFA Society Chicago.

Education: B.S. and M.S., accountancy, University of Illinois Urbana-Champaign



Bryan Shea

Bryan Shea is a global equity research analyst. He covers industrials, materials, and utilities.

Previously, he was a small-cap generalist analyst in emerging markets and a global research associate supporting the consumer team. He joined the firm in 2009 as an associate on the sell-side focusing on several subsectors within consumer. Before joining William Blair, Bryan was an associate at Madison Capital Funding, where he provided a variety of cash-flow-based, leveraged-capital products to private-equity sponsors. Before that, he was an analyst at Lincoln International, where he worked on mergers and acquisitions, issued fairness opinions, and conducted private company valuations.

Education: B.S., finance, with honors, Indiana University; M.B.A., Northwestern University's Kellogg School of Management



Thomas A. Sternberg, CFA
Partner

Tommy Sternberg, CFA, partner, is a global equity research analyst. He covers large-cap healthcare companies.

Previously, he was a research associate focused on the healthcare industry. Before joining William Blair in 2004, Tommy spent two years as an equity analyst in Oak Brook Bank's investment management and trust department. He is a member of the CFA Institute and the CFA Society Chicago.

Education: B.S., economics, Duke University; M.B.A., University of Chicago's Booth School of Business

Biographies – Global Investment Team

Quantitative Research



Spiro Voulgaris
Partner

Spiro Voulgaris, partner, is a senior quantitative analyst. He joined William Blair in 2007.

Before joining the firm, Spiro was a senior quantitative analyst with Neuberger Berman for five years and subsequently worked alongside the same investment professionals for an additional three years while with Northern Trust. He was also with Lehman Brothers for six years, where he was a strategist and quantitative analyst for its global and U.S. investment strategy teams in London and New York. Before that, Spiro spent three years as a research analyst with the Center for Research in Securities Prices (CRSP).

Education: B.A., economics, University of Chicago; M.B.A., statistics and international finance, University of Chicago's Booth School of Business



Andrew Kominik, CFA

Andrew Kominik, CFA, is a senior quantitative analyst on William Blair Investment Management's systematic research team, where he focuses on proprietary equity risk models and general factor and model research.

Previously, Andrew served as investment risk manager, quantitative portfolio analyst, portfolio construction analyst, and marketing analyst. Before joining William Blair in 2003, he worked in institutional marketing at Columbia Management Group. Andrew is a member of the CFA Institute and the CFA Society Chicago.

B.A., history, Brandeis University; M.B.A., finance and econometrics and statistics, University of Chicago's Booth School of Business



Jesse Lambersky, CAIA

Jesse Lambersky, CAIA, is a quantitative research analyst on the quantitative research team.

In this role, he performs machine learning research to evaluate quantitative factor efficacy and macro-fundamental trends. Jesse also develops models that aid in portfolio strategy and quantitative stock-selection. Before joining William Blair in 2022, he was a commodity trader at JDL Metals. Jesse is a CAIA charterholder.

B.S., finance, University of Western Ontario; Master's degree, finance, IE Business School, and M.S., analytics, University of Chicago



Andy Tang, CFA

Andy Tang, CFA, is a quantitative research analyst on the quantitative research team.

In this role, he conducts research on quantitative finance and builds tools for portfolio optimization and risk management. Before joining William Blair in 2016, Andy spent five years as a quantitative analyst at Morningstar, where he worked on designing and building the Morningstar global equity risk model and global portfolio optimizer. He also worked on fixed-income pricing and risk analytics and big-data analytics on financial text modeling. He is a member of the CFA Institute and the CFA Society Chicago.

B.A., economics, Donghua University; M.S., finance, Illinois Institute of Technology; M.S., statistics, University of Chicago

Biographies – Global Investment Team

Quantitative Research



Andrew Wickman, CFA

Andrew Wickman, CFA, is a quantitative research analyst on the quantitative research team.

In this role, he performs econometric research that evaluates quantitative factor efficacy and macro-fundamental trends. Andrew also develops models that aid in portfolio strategy and quantitative stock-selection. Before joining William Blair in 2015, he was a consultant at FactSet Research Systems. Andrew is a member of the CFA Institute and the CFA Society Chicago.

Education: B.S., economics, University of Kentucky; M.B.A., concentrations in analytic finance, economics, and statistics/econometrics, University of Chicago's Booth School of Business

Biographies – Global Investment Team

Strategy Research and Technology



Olga Bitel, Partner

Olga Bitel, partner, is a global strategist.

She is responsible for economic research and analysis across all regions and sectors. She distills macroeconomic and geopolitical developments into actionable insights for global equity portfolios within a multifaceted strategic framework. In addition, she provides insights about cyclical turning points and structural trends as inputs into portfolio construction in predominantly bottom-up investment approaches. Before joining William Blair in 2009, Olga was a senior economist at the National Institute of Economic and Social Research in London, United Kingdom, where she produced macroeconomic forecasts for most Asian economies and led thematic research projects for some of the world's best-known international organizations, including the Organization of the Petroleum Exporting Countries and the International Monetary Fund.

Education: B.A., University of Chicago; M.Sc., economics, London School of Economics and Political Science



Blake Pontius, CFA

Blake Pontius, CFA, is director of sustainable investing.

In this role, he coordinates the firm's integration of environmental, social and governance (ESG) factors in its investment processes and provides ESG research support to the global equity team. Blake also leads the firm's ESG leadership team. Previously at William Blair, he was a global portfolio specialist and institutional client relationship manager. Before joining William Blair in 2005, Blake worked at UBS Asset Management and Mercer. He is a board member of Easterseals DuPage & Fox Valley; a member of CFA Institute; and a member and board member of CFA Society Chicago. In addition, Blake holds the SASB Fundamentals of Sustainability Accounting (FSA) credential and the CFA Certificate in ESG Investing.

B.A., economics, with honors, Michigan State University; M.B.A. in finance, with distinction, from DePaul University



Rita Spitz, Partner, CFA

Rita Spitz, CFA, partner, is a global equity research analyst focusing on ESG integration.

She is on William Blair's Global Inclusion Council and the ESG/Impact Investing Working Group. Previously, she was a research analyst covering U.S. and global consumer stocks across the range of market capitalizations. She served as director of research from 2001 to 2008. Rita joined William Blair in 1986 as a sell-side research analyst covering advertising and marketing firms, a role she held for 13 years. She is a member of the CFA Society Chicago, the CFA Institute, and The Economic Club of Chicago. She has also served on the advisory groups of the Financial Accounting Standards Board. She is a trustee of The Joffrey Ballet.

B.B.A., finance and Spanish, University of Wisconsin–Madison; M.B.A., University of Chicago's Booth School of Business



Darragh Grogan

Darragh Grogan is a technologist on the global equity team.

In this role, he works with William Blair's IT development team to implement technological improvements into the investment process. Before joining William Blair in 2008 as a software engineer supporting trading and reconciliation, Darragh was a senior software engineer at Accenture and Fidelity.

B.Com. and a higher diploma in applied science (software development and design), National University of Ireland in Galway; M.S., advanced software engineering, University College Dublin

Biographies – Client Service Team

Douglas J. Kryscio, CFA, Partner

Doug Kryscio, CFA, partner, is head of North America client service at William Blair Investment Management. Previously at William Blair, he was a senior client relationship manager. Before joining the firm in 2011, he was at Mercer Investment Consulting for 11 years, most recently as a partner, and earlier as a business leader for the Midwest and Great Lakes markets. Before joining Mercer, Doug was a portfolio manager at First Chicago. He is a member of the CFA Institute and the CFA Society Chicago. Doug received a B.B.A. in finance, with department honors, from the University of Kentucky and an M.B.A. in finance, with distinction, from DePaul University. He was a member of Phi Kappa Phi and Delta Mu Delta National Honor Society.

Julie Stevens, CFA

Julie Stevens, CFA, is the head of client service for William Blair Investment Management. She has been a member of the client service team since May 2004, and was previously a member of the operations team. Before joining William Blair in 2000, Julie spent three years as a financial analyst for Bank One's asset liability management department. She is a member of the CFA Institute and the CFA Society Chicago. Julie received a B.S. from Indiana University and an M.B.A. from the University of Chicago's Booth School of Business.

James Dominguez, CAIA

James Dominguez, CAIA, is a client relationship manager with William Blair Investment Management. Before joining the firm in 2016, he was a vice president and relationship manager for Northern Trust Asset Management, working with public pension plans and Taft-Hartley plans. While at Northern Trust, James also served as an associate relationship manager in the institutional sales and client service group and a senior investment manager liaison with investment operations. Before joining Northern Trust, James was the managing director of a national employment and training organization, where he oversaw the service delivery of five workforce programs for the City of Chicago's Mayor's Office of Workforce Development. James is a member of the CAIA Association. He received a B.A. in psychology from Roosevelt University and an M.B.A. in financial analysis from DePaul University's Kellstadt Graduate School of Business.

Cliff Kalish, CFA

Cliff Kalish, CFA, is a senior client relationship manager with William Blair Investment Management. Before joining William Blair in 2011, Cliff was a client relationship manager at Calamos Investments for six years and a research analyst at Ellwood Associates for five years. Cliff is a member of the CFA Institute and the CFA Society Chicago. He received a B.S. in consumer economics with an option in finance from the University of Illinois at Urbana-Champaign.

Renee McGrail, CAIA

Renee McGrail, CAIA, is a senior client relationship manager with William Blair Investment Management. Before joining William Blair in 2022, Renee was a client relationship manager at UBS Asset Management for 14 years. In this role, she was responsible for institutional client coverage, consultant relations, and business development for a variety of plan types, including corporate and public pension plans, Taft-Hartley plans, and foundations and endowments. Before joining UBS, Renee was a fixed-income sales assistant with Countrywide Securities and a financial analyst in Deutsche Bank's securitized products group. Renee is a member of the CAIA Association. She received a B.B.A. in finance from the University of Notre Dame.

Julie Rancourt, Partner

Julie Rancourt, partner, is a senior client relationship manager with William Blair Investment Management. Before joining William Blair in 2018, she was a relationship manager with Wellington Management. In this role, she was responsible for institutional client coverage, including public funds, endowments, foundations, and corporate pension plans. Before joining Wellington Management in 2015, Julie was a managing director and senior client portfolio manager in the global fixed income, currency, and commodities group at J.P.Morgan Asset Management. In this role, she was responsible for investment strategy, performance, and attribution communication to institutional clients. Julie received a B.S in business administration, with a focus on finance, from Villanova University.

Stephen J. Weeks, Partner

Steve Weeks, partner, is a senior client relationship manager with William Blair Investment Management. Before joining William Blair in 2015, he was senior vice president of marketing, consultant relations, and client services at Columbus Circle Investors (CCI). Before joining CCI in April 2005, Steve was a director and senior investment specialist for Principal Global Investors and one of the founding partners of GlobeFlex Capital, where he was responsible for institutional marketing and client service. Steve is a current board advisor of the National Conference on Public Employee Retirement Systems (NCPERS). He received a B.S. in finance from the University of Arizona. Steve currently holds FINRA series 7, 63, and 24 securities licenses.

Biographies – Client Service Team

Dani Artz

Dani Artz is a client service associate with William Blair Investment Management. Before joining the firm in July 2021, Dani was a Client Programs Associate at Fisher Investments for three years. She received a B.S.B. in Marketing and Management at Indiana University.

Matt Brady, CFA

Matt Brady, CFA, is a senior client services associate, responsible for both international and U.S. accounts, with William Blair Investment Management. He joined William Blair in May 2015. Previously, Matt was an analyst on the product development and management team for BMO Global Asset Management. He is a member of the CFA Institute and the CFA Society Chicago. He received a B.B.A. in finance and risk management from the University of Wisconsin–Madison.

Shon'treal Bullocks

Shon'treal Bullocks is a client service associate with William Blair Investment Management. In this role, he is responsible for client onboarding and cash flows. Before joining the firm in August 2020, Shon'treal was an investment performance analyst and investment operations analyst at Northern Trust Corporation. He received a B.B.A. in business management from Robert Morris University Illinois.

Dana Denizman

Dana Denizman is a senior client services associate, responsible for both international and U.S. accounts. She joined William Blair in 1999 as a member of the small-cap growth team and has been a member of the client service team since May 2004. Previously, she spent four years at PaineWebber in various positions, including a registered sales assistant and branch office administrator, and was a member of the firm's management development program. Before that, Dana spent four years at American Century as a client service representative. Dana received a B.A. from the University of Iowa.

Jennifer Raketich

Jennifer Raketich is a senior client service associate with William Blair Investment Management. In this role, she is responsible for both international and U.S. accounts. Before joining the firm in 2014, Jennifer was a second vice president and senior consultant in the investment manager operations outsourcing group at Northern Trust. While at Northern Trust, she was also a senior account manager in the corporate and institutional services group. She received a B.S. from DePaul University and an M.B.A. from Saint Xavier University.

Chris Remis

Chris Remis is a senior client service associate with William Blair Investment Management. In this role, he is responsible for supporting institutional accounts across the firm's product lineup. Before joining William Blair in July 2021, Chris was a senior associate on the institutional sales and service team at BMO Global Asset Management. He received a B.S.B. in finance from DePaul University.

Thomas Riesenberg

Tom Riesenberg is a lead client onboarding associate with William Blair Investment Management. In this role, he is responsible for both international and U.S. accounts. Previously, Tom was an international accounting analyst for three years. Before joining the firm in November 2014, Tom was a financial reporting analyst at The Northern Trust Company for four years. He received a B.S.B.A. in finance from Creighton University.

Glossary – Terms

Active Share: A measure of the percentage of stock holdings in a manager's portfolio that differ from the benchmark index.

Alpha: A measure of a portfolio's return in excess of the market return, after both have been adjusted for risk. It is a mathematical estimate of the amount of return expected from a portfolio above and beyond the market return at any point in time. For example, an alpha of 1.25 indicates that a stock is projected to rise 1.25% in price in a year over the return of the market, or the return when the market return is zero. When an investment price is low relative to its alpha, it is undervalued, and considered a good selection.

Beta: A quantitative measure of the volatility of the portfolio relative to the overall market, represented by a comparable benchmark. A beta above 1 is more volatile than the overall market, while a beta below 1 is less volatile, and could be expected to rise and fall more slowly than the market.

CFROIC (Cash Flow Return on Invested Capital): A measure of how effectively a company generates cash flow based on legacy capital investment.

Convexity: A measure of the sensitivity of a fixed income investment's duration to changes in yield.

Developed Markets: Using the Morgan Stanley Capital International (MSCI) geographic definition, this region includes: United Kingdom, Europe (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Spain, Sweden and Switzerland), Japan, Pacific Asia (Australia, Hong Kong, New Zealand, and Singapore) and the Western Hemisphere (Canada and other Americas).

Debt to Total Capital Ratio: This figure is the percentage of each company's invested capital that consists of debt. Companies with a high Debt to Total Capital level may be considered riskier. From a portfolio perspective, the portfolio Debt to Total Capital Ratio is a weighted average of the individual holdings' Debt to Total Capital Ratio.

Duration: A measure of the price sensitivity of a fixed income investment to a change in interest rates, stated in years.

Emerging Markets: Using MSCI's geographic definition, this region includes: Emerging Markets Asia (China, India, Indonesia, Malaysia, S Korea, Taiwan, and Thailand), Emerging Markets Europe, Mid-East and Africa (Czech Republic, Hungary, Poland, Russia, Turkey, Egypt, Morocco, and S Africa), and Latin America (Argentina, Brazil, Chile, Columbia, Mexico, Peru and Venezuela).

EPS Estimate Revision Breadth: A 1-month factor representing the trend in the direction of estimate changes. Range from -100% to +100%, it is calculated as the number of positive revisions minus the number of negative revisions divided by the total number of estimates.

EPS (Earnings Per Share) Growth Rate (Projected): This measure represents the weighted average of forecasted growth in earnings expected to be experienced by the stocks within the portfolio over the next year. From a portfolio perspective, the portfolio EPS Growth Rate is a weighted average of the individual holdings' EPS Growth Rate.

EPS Growth Rate (5-Year Historic): The weighted average earnings per share growth for stocks within the portfolio over the past 5 years.

EV/EBITDA (Enterprise Value/Earnings Before Interest, Taxes and Depreciation-Amortization): The EV/EBITDA ratio is useful for global comparisons because it ignores the distorting effects of individual countries' taxation policies. It's used to find attractive takeover candidates. Enterprise value is a better measure than market cap for takeovers because it takes into account the debt which the acquirer will have to assume. Therefore, a company with a low EV/EBITDA ratio can be viewed as a good takeover candidate.

EV/IC: (Enterprise Value/Invested Capital) Ratio: Enterprise Value (EV), which is market capitalization minus cash plus debt divided by Invested Capital (IC), which is the sum of common stock, preferred stock and long-term debt. This number will get you a simple multiple. If it is below 1.0, then it means that the company is selling below book value and theoretically below its liquidation value.

Frontier Markets: Less advanced capital markets in the developing world.

FX: In finance, an exchange rate is the rate at which one currency will be exchanged for another. It is also regarded as the value of one country's currency in relation to another currency.

Information Ratio: A measure of risk-adjusted return. The annualized excess return of the portfolio relative to a respective benchmark, divided by the annualized tracking error relative to that same benchmark. The higher the measure, the higher the risk-adjusted return.

Integrated: Constructs a portfolio of the top 20% of stocks based on William Blair's multi-factor composite model, which uses Earnings Trend, Momentum, Quality, and Valuation factors. The portfolio is rebalanced on a monthly basis and weights stocks based on relative market capitalization.

Net Debt to EBITDA: A measure of leverage calculated by taking interest bearing liabilities minus cash divided by earnings before interest, taxes, depreciation, and amortization.

Option-Adjusted Spread (OAS): A measure of the spread of a fixed income investment's yield relative to a benchmark, adjusted to take into account an embedded option.

PBVn (Price/Book Value) Ratio: The PBV Ratio measures the value of a company's common stock relative to its shareholder's equity. A price-to-book multiple above one means that the price of the company's common stock is higher than its common shareholder's equity. A price-to-book multiple below one means that the price of the company's common stock are less than its break-up value, and the shares may be undervalued.

PCF (Price/CashFlow): Some analysts favor the price/cash flow over the price-earnings (PE) ratio as a measure of a company's value. Cash flow is a measure of a company's financial health. It equals cash receipts minus cash payments over a given period of time.

P/E (Price/Earnings) Ratio: This is the most common measure of how expensive a stock is. Simply, it is the cost an investor in a given stock must pay per dollar of current annual earnings. A high P/E generally indicates that the market is paying more to obtain the stock because it has confidence in the company's ability to increase its earnings. Conversely, a low P/E often indicates that the market has less confidence that the company's earnings will increase rapidly or steadily, and therefore will not pay as much for its stock.

Price to Book: A stock's capitalization divided by its book value. This ratio compares the market's valuation of a company to the value of that company as indicated on its financial statements.

R-squared: A measurement of how closely the portfolio's performance correlates with the performance of its benchmark, such as the MSC AC World Free ex US Index. In other words, it is a measurement of what portion of a portfolio's performance can be explained by the performance of the overall market or index. Ranges from 0 to 1, where 0 indicates no correlation and 1 indicates perfect correlation.

Recovery Rate: The extent to which principal and interest on defaulted debt can be recovered, expressed as a percentage of face value.

Risk (Standard Deviation): A measure of the portfolio's risk. A higher standard deviation represents a greater dispersion of returns, and thus a greater amount of risk. The annualized standard deviation is calculated using monthly returns.

Silo: Constructs portfolios using the top 20% of stocks based on each of the four sub-models used to construct William Blair's composite model, then averages the returns coming from each of the four portfolios. The portfolios are rebalanced on a monthly basis and weights stocks based on relative market capitalization. (The Equal Weighted strategy equally weights the returns coming from each of the sub-portfolios; the Optimized approach weights Quality 5%, Valuation 60%, Earnings Treng 5%, and Momentum 30%. The optimization was based on a Monte-Carlo simulation that sought an optimal weighting of each sub-portfolios to achieve the highest return).

Sortino Ratio: A modification of the Sharpe ratio that differentiates harmful volatility from general volatility by taking into account the standard deviation of negative asset returns, called downside deviation. The Sortino ratio subtracts the risk-free rate of return from the portfolio's return, and then divides that by the downside deviation. A large Sortino ratio indicates there is a low probability of a large loss.

Sharpe-Ratio: A risk-adjusted measure calculated using standard deviation and excess return (Portfolio return – Risk Free Rate) to determine reward per unit of risk. The higher the Sharpe ratio, the better the portfolio's historic risk-adjusted performance.

Spread Duration: A measure of the price sensitivity of a fixed income investment to a change in credit spreads.

Tracking Error: Tracking Error measures the extent to which a portfolio tracks its benchmark. The tracking error of an index portfolio should be lower than that of an active portfolio. The tracking error will always be greater than zero if the portfolio is anything other than a replication of the benchmark.

Trailing 1-Year Turnover: This figure reflects the portfolio's trading activity by calculating the amount of the portfolio's holdings bought or sold over the prior year, expressed as a percentage of the portfolio's average market value. Turnover figures may be related to the amount of trading costs experienced by the portfolio.

Weighted Average Market Capitalization: Market capitalization refers to the total market value of each company's outstanding shares. The Weighted Average Market Capitalization for a portfolio is calculated as the average market capitalization of the stocks within the portfolio, weighted by the amount of each stock owned.

Weighted Median Market Capitalization: This calculation represents the median market capitalization of the stocks in the portfolio, weighted by the amount of each stock owned.

Yield to Maturity: A representation of the rate of return anticipated on a bond if held until its maturity.

Yield to Worst: A representation of the lowest potential yield that an investor would receive on a bond if the issuer does not default.

Glossary – Indices

MSCI (Morgan Stanley Capital International): MSCI indices are the most widely used benchmarks by global portfolio managers. MSCI offers international investors performance benchmarks for 51 national stock markets as well as regional, sector, industry group, and industry aggregations.

MSCI China All Shares Index: a free-float weighted equity index designed to capture large and mid-cap representation across China A-shares, B-shares, H-shares, Red- chips, P-chips and foreign listings (e.g. ADRs). The index aims to reflect the opportunity set of China share classes listed in Hong Kong, Shanghai, Shenzhen and outside of China.

MSCI China A Onshore Index: A free-float weighted equity index, designed to measure performance of China A share securities listed on either the Shanghai or Shenzhen Stock Exchanges.

MSCI All Country World ex-US EAFE Index: An unmanaged index that includes developed and emerging markets outside the United States.

MSCI All Country World ex-US Small Cap Index: A free float-adjusted market capitalization index designed to measure global developed and emerging market small capitalization equity performance, excluding the U.S.

MSCI All Country World ex-US Index: An unmanaged index that includes developed and emerging markets, excluding the U.S.

MSCI All Country World ex-US Growth Index: A free float-adjusted market capitalization index that is designed to provide a broad measure of equity-market performance throughout the world, excluding the U.S. It includes those MSCI All Country World ex-US securities with higher price-to-book ratios and higher forecasted growth rates.

MSCI All Country World ex-US IMI Index: A free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets, excluding the U.S.

MSCI All Country World IMI Index: A free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets.

MSCI All Country World ex-US IMI Growth Index: A free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets, excluding the U.S. It includes those MSCI All Country World ex-US IMI Index securities with higher price-to-book ratios and higher forecasted growth rates.

MSCI EAFE Index: A free float-adjusted market capitalization index which captures large and mid cap representation across Developed Markets countries around the world, excluding the U.S. and Canada.

MSCI EAFE IMI Index: A free float-adjusted market capitalization index which captures large, mid and small cap representation across Developed Markets countries around the world, excluding the U.S. and Canada.

MSCI EAFE Growth Index: A free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. & Canada.

MSCI Emerging Markets Index: A free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.

MSCI Emerging Markets IMI Index: A free float-adjusted market capitalization index which captures large, mid and small cap equity market performance in the global emerging markets.

MSCI Emerging Markets ex-China IMI Index: A free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets excluding China.

MSCI Emerging Markets Small Cap Index: A free float-adjusted market capitalization index that is designed to measure equity market performance of small cap companies in emerging markets.

MSCI Emerging Markets Large Cap Index: A free float-adjusted market capitalization index that is designed to measure equity market performance of large cap companies in emerging markets.

MSCI World ex-US Growth Index: A free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets, excluding the U.S., with higher price-to-book ratios and higher forecasted growth rates.

MSCI World ex-US Index: A free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets, excluding the U.S.

MSCI World ex-US Small Cap Index: An unmanaged index that includes non-US developed markets.

Russell 1000 Index: Measures the performance of the 1000 largest companies in the Russell 3000 Index, which represents approximately 90% of the total market capitalization of the U.S. market.

Russell 1000 Growth Index: Measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value Index: Measures the performance of the large cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 2000 Index: Measures the performance of the 2000 smallest companies in the Russell 3000 index, which represents approximately 8% of the total market capitalization of the Russell 3000 index.

Russell 2000 Growth Index: Measures the performance of those Russell 2000 companies with higher price-to book ratios and higher forecasted growth values.

Russell 2000 Value Index: Measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 2500 Index: Measures the performance of the 2500 smallest companies in the Russell 3000 Index.

Russell 2500 Growth Index: Measures the performance of those Russell 2500 companies with higher price-to book ratios and higher forecasted growth values.

Russell 2500 Value Index: Measures the performance of those Russell 2500 companies with lower price-to book ratios and lower forecasted growth values.

Russell 3000 Index: Measures the performance of the 3000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

Russell 3000 Growth Index: Measures the performance of those Russell 3000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell Midcap Index: Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 27% of the total market capitalization of the Russell 1000 companies.

Russell Midcap Growth Index: Measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values.

Russell Midcap Value Index: Measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell Midcap Index companies with lower price-to-book ratios and lower forecasted growth values.

S&P 500 Index: The Standard & Poor's 500 Index (S&P 500) is an index of 500 stocks chosen for market size, liquidity and industry grouping, among other factors. The S&P 500 is designed to be a leading indicator of U.S. equities and is meant to reflect the risk/return characteristics of the large cap universe. Companies included in the index are selected by the S&P Index Committee, a team of analysts and economists at Standard & Poor's. The S&P 500 is a market value weighted index—each stock's weight is proportionate to its market value.

A direct investment in an unmanaged index is not possible.

Quantitative Models – Definitions

Factor	Examples
Quality	
The William Blair Quality Model attempts to put into quantitative terms one of the cornerstones of the firm's investment philosophy: identifying high quality companies. The score combines measurements of sustainable value creation, earnings quality, and financial strength.	Cash Flow ROIC Cash Flow Accruals Net Debt/EBITDA
Valuation	
The William Blair Valuation Model combines varying metrics used to characterize the relationship between the stock's trading price and its intrinsic value. By going beyond using only one or two measures, the model attempts to build a more holistic version of a stock's worth vis-a-vis the market. The score combines measurements of earnings/cash flow based, asset-based, and model-based factors.	Free Cash Flow Yield Price/NTM Earnings Enterprise Value/Sales
Earnings Trend	
The William Blair Earnings Trend Model captures information about short- and medium-term changes in analyst estimates in an attempt to anticipate future estimate changes and stock performance. The score combines measurements of earnings revisions, earnings momentum, and earnings surprise.	3 Month EPS Revisions Standardized Unexpected Earnings (SUE)
Momentum	
The William Blair Momentum Model combines information about short- and medium-term performance trends for each stock in order to identify stocks that may be able to persist in outperformance over the near term.	12 Month Volatility Adjusted Return 6 Month Sharpe Ratio
Growth	
The William Blair Growth Model builds a long-term growth estimate based on a combination of realized and forecast growth rates. The inputs and results of this model are not limited to earnings, but instead cast a broader net to include measures of a firm's overall growth. In addition to providing a Growth Model score, the growth rate generated by the model is used as an input into other models.	Historical & Expected Growth 6 & 10 Year Average Trend Growth
Volatility	
The William Blair Volatility Model captures the variability in short- and long-term fundamental returns which include ROE, Margins, and EPS.	ROE Range/Average Coefficient of Variation & Dispersion of EPS
Composite	
The William Blair Composite Model produces an aggregate score from the Quality, Valuation, Earnings Trend, and Momentum models using a proprietary weighting mix.	

William Blair proprietary quantitative model.

Composite Presentation Report

International Growth

Calendar Year	Composite Gross Return (%)	Composite Net Return (%)	MSCI ACWI ex US IMI (net) – Linked Return (%)	Composite 3-Yr Std Dev (%)	Benchmark 3-Yr Std Dev (%)	Number of Portfolios	Dispersion (%)	Composite Assets End of Period $(mm)	Total Firm Assets $(mm)
2013	21.14	20.17	15.82	15.41	16.24	40	0.27	16,962.01	62,018.81
2014	-1.40	-2.18	-3.89	12.03	12.78	38	0.23	15,481.25	63,060.05
2015	0.46	-0.34	-4.60	10.94	11.95	36	0.29	15,242.21	64,777.78
2016	-1.40	-2.18	4.41	11.22	12.38	40	0.30	14,279.91	64,872.51
2017	30.95	29.90	27.81	11.01	11.77	38	0.34	16,350.96	73,549.85
2018	-16.88	-17.54	-14.76	12.29	11.47	36	0.24	12,464.52	48,880.26
2019	32.07	31.02	21.63	12.29	11.34	30	0.34	14,348.99	58,446.29
2020	32.80	31.74	11.12	18.28	18.27	33	1.39	15,583.82	69,739.61
2021	11.00	10.11	8.53	16.64	17.13	32	1.16	14,247.23	79,683.54
2022	-28.21	-28.78	-16.58	21.69	19.64	27	0.45	8,899.77	56,036.64

Disclosures:

William Blair Investment Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. William Blair Investment Management has been independently verified for the periods January 1, 1993 through December 31, 2022. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The International Growth Composite has had a performance examination for the periods from composite inception through December 31, 2022. The verification and performance examination reports are available upon request.

For purposes of compliance with GIPS, the Firm is defined as all portfolios managed by William Blair Investment Management, a distinct operating unit within William Blair. William Blair Investment Management currently operates as William Blair Investment Management, LLC, an investment adviser registered with the United States Securities and Exchange Commission ("SEC") which is a separate legal entity that is distinct from William Blair & Company, L.L.C. Registration with the SEC does not imply a certain level of skill or training.

The International Growth strategy invests in a broad range of companies based in developed and emerging markets outside of the United States. Companies have had and are expected to maintain superior growth, profitability and quality relative to local markets. The strategy will occasionally include the use of forward currency contracts to hedge some of the foreign currency exposure which accompanies investment in foreign currency-denominated securities. A portfolio manager change occurred effective 5/1/2013, 12/1/2013, 5/1/2015, 12/1/2017, 3/1/2018, and 1/1/2022. The investment strategy was not materially altered by the personnel change.

The benchmark that best reflects the composite's investment strategy is the MSCI All Country World Ex US Investable Market Index (net), which is a free float-adjusted market capitalization index that is designed to measure equity market performance, net of withholding taxes, in the global developed and emerging markets, excluding the US.

Portfolios must have an initial market value greater than or equal to $1 million to be included in the composite. New portfolios are added to the composite at the beginning of the month following the first full calendar month under management. Portfolios will be excluded from the composite the first month immediately following the last complete month of authorized management by the Firm. Portfolios are removed from this composite, in the event of a significant cash flow, for the month during which the flow occurs. Portfolios are typically added back into the composite the following month. A portfolio is determined to have a significant cash flow if the accumulated net external flows of cash and/or securities during a month exceed the significant cash flow threshold, which was 25% of the beginning of month portfolio market value through December 31, 2020 and 10% thereafter. Additional information regarding the treatment of significant cash flows is available upon request.

Performance includes the reinvestment of dividends and other earnings. Portfolio and composite returns are calculated daily. Valuations and returns are denominated in U.S. Dollars. Accrual accounting is used for dividends. The dividend accruals included in portfolio valuations are net of applicable withholding taxes. Pending withholding tax reclaims are not accrued for in the portfolio valuations. Composite dispersion measures represent the consistency of a firm's composite performance with respect to the individual portfolio returns within a composite. The dispersion of annual returns is measured by the asset-weighted standard deviation of the gross returns in the composite. Dispersion includes only those portfolios that have been included in the composite for the entire year. The three-year annualized standard deviation measures the variability of the gross composite returns and the benchmark returns over the preceding 36-month period. This statistic is not presented until there are 36 months of performance available.

Performance results are stated gross of management fees and net of a model investment management fee for the strategy. The model fee is the maximum separate account management fee as of the time the composite return was calculated, applied by dividing that annual fee by the count of the annual calculation periods for the composite and then subtracting that quotient from the periodic gross composite returns. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. The current separate account management fee schedule is as follows: Up to $20,000,000: 0.80%, next $30,000,000: 0.60%, next $50,000,000: 0.50%, next $50,000,000: 0.45%, next $50,000,000: 0.40%, over $200,000,000: 0.30%.

The strategy is available via one or more pooled funds, which may have alternate fee schedules. The limited distribution pooled fund is William Blair International Growth Collective Investment Fund, which has a highest management fee of 0.8% and a highest expense ratio of 0.95%. The information presented above is for informational purposes only and is not an offer to sell or solicitation of an offer to buy securities or otherwise make an investment in any private fund managed by William Blair ("William Blair Fund"). Any offer to sell or a solicitation of an offer to purchase Interests in a William Blair Fund will only be made by means of a confidential private placement memorandum or similar document (a "Memorandum"); no offer to purchase an Interest will be accepted prior to receipt by the offeree of a Memorandum and the completion of all appropriate documentation.

The International Growth Composite was created in October 2001. The composite performance inception date is December 1, 1992.

A complete list and description of firm composites and pooled funds is available upon request. Additional information regarding valuing investments, calculating performance, and preparing GIPS reports is also available upon request. Past performance is not indicative of future results. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

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Investing involves risks, including the possible loss of principal. Equity securities may decline in value due to both real and perceived general market, economic, and industry conditions. Investing in foreign denominated and/or domiciled securities may involve heightened risk due to currency fluctuations, and economic and political risks. These risks may be enhanced in emerging markets. Any investment or strategy mentioned herein may not be appropriate for every investor.

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Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
CONSENT AGENDA

Attachments

May 2023 Consent Agenda for Refunds

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:45 PM
Final Approval Date: 05/10/2023

CONSENT AGENDA
REFUND OF MEMBER CONTRIBUTIONS
MAY 2023
RETIREMENT BOARD MEETING

CITY	AGENCY	PERIOD	DATE OF TERMINATION	DATE OF REFUND	TOTAL AMOUNT OF REFUND	TAX DEBIT	RE-PAYMENT	NET AMOUNT	CHECK NUMBER
LARREMORE, TERRY LEE	UA	7	6/12/2018	4/14/2023	$4,014.43	$802.89	$0.00	$3,211.54	**47090**
CASS, BRANDON	UA	7	12/2/2021	4/14/2023	$13,562.23	$0.00	$0.00	$13,562.23	**47091**
PAJAK, JAKUB	UA	7	1/5/2023	4/14/2023	$9,702.01	$1,940.40	$0.00	$7,761.61	**47092**
				TOTAL:	**$27,278.67**	**$2,743.29**	**-**	**$24,535.38**	

Retirement Board
Meeting Date: 05/18/2023
Re:
Submitted For: Johnna Morris, Finance Director, Finance Department

Information

SUBJECT:
MISCELLANEOUS

Attachments

Report From Money Manager -Emerald Asset Management
Report From Money Manager - Heitman
Report From Money Manager-Ceredex
Financial Report Feb 2023

Form Review

Form Started By: Junelly Jimenez-Sabastiano Started On: 05/10/2023 04:18 PM
Final Approval Date: 05/10/2023

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EMERALD ADVISERS, LLC
SMALL CAPITALIZATION GROWTH

DISCIPLINED SMALL CAP GROWTH FOCUS
GROUNDED BY FUNDAMENTAL INVESTMENT RESEARCH

PREPARED FOR:

FORT PIERCE
THE SUNRISE CITY

DATA AS OF 03-31-2023

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Inception to Date

Statement of Cashflow

AS OF
MARCH 31, 2023

Original Investment	**$4,841,219.58**	
Contributions	**$1,000,000.00**	
Withdrawals	**-$9,418,226.94**	
Management Fees:	**-$1,002,537.71**	**Total**
1Q04	-$1,499.47	
2Q04	-$10,496.24	
3Q04	-$4,804.83	
4Q04	-$10,840.63	
1Q05	-$10,406.50	
2Q05	-$10,663.78	
3Q05	-$11,314.23	
4Q05	-$11,689.52	
1Q06	-$13,377.49	
2Q06	-$12,840.88	
3Q06	-$12,400.84	
4Q06	-$12,973.99	
1Q07	-$13,372.71	
2Q07	-$12,999.35	
3Q07	-$11,334.91	
4Q07	-$10,462.07	
1Q08	-$9,129.24	
2Q08	-$9,499.07	
3Q08	-$9,102.94	
4Q08	-$7,072.70	

Management Fees (Continued):	
1Q09	-$6,610.24
2Q09	-$7,486.93
3Q09	-$8,601.21
4Q09	-$10,134.48
1Q10	-$11,610.98
2Q10	-$10,760.62
3Q10	-$12,001.66
4Q10	-$12,532.52
1Q11	-$13,664.03
2Q11	-$13,554.81
3Q11	-$9,250.42
4Q11	-$10,427.46
1Q12	-$12,332.14
2Q12	-$11,474.10
3Q12	-$12,193.85
4Q12	-$12,038.06
1Q13	-$13,565.10
2Q13	-$14,234.57
3Q13	-$16,471.32
4Q13	-$16,650.18
1Q14	-$17,075.62
2Q14	-$16,699.88
3Q14	-$15,959.43

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Inception to Date

Statement of Cashflow

AS OF
MARCH 31, 2023

Management Fees (Continued):	
4Q14	-$17,095.17
1Q15	-$17,115.17
2Q15	-$18,215.70
3Q15	-$14,566.22
4Q15	-$14,228.14
1Q16	-$12,347.47
2Q16	-$12,482.11
3Q16	-$13,613.33
4Q16	-$14,044.61
1Q17	-$14,658.39
2Q17	-$15,559.11
3Q17	-$16,500.19
4Q17	-$17,671.17
1Q18	-$17,357.17
2Q18	-$18,780.48
3Q18	-$19,956.46
4Q18	-$15,751.99
1Q19	-$18,828.52
2Q19	-$18,086.78
3Q19	-$16,412.08
4Q19	-$18,101.56
1Q20	-$11,602.25
2Q20	-$12,885.41
3Q20	-$13,974.24

Management Fees (Continued):	
4Q20	-$17,238.62
1Q21	-$17,588.14
2Q21	-$18,201.59
3Q21	-$17,907.11
4Q21	-$17,892.14
1Q22	-$16,107.36
2Q22	-$13,091.69
3Q22	-$13,066.34
4Q22	-$13,829.90
1Q23	-$14,336.32

Total Investment Earnings	$11,587,081.29
Income	$529,181.65
Capital Appreciation/(Depreciation)	$11,057,899.64
Total Assets as of March 31, 2023	$6,979,370
Total Assets as of April 30, 2023 (Preliminary)	$6,967,506

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WHO WE ARE

Driven by In-Depth Fundamental, Bottom-Up Research

Employees Participate in Ownership via ESOP Plan and Equity Awards

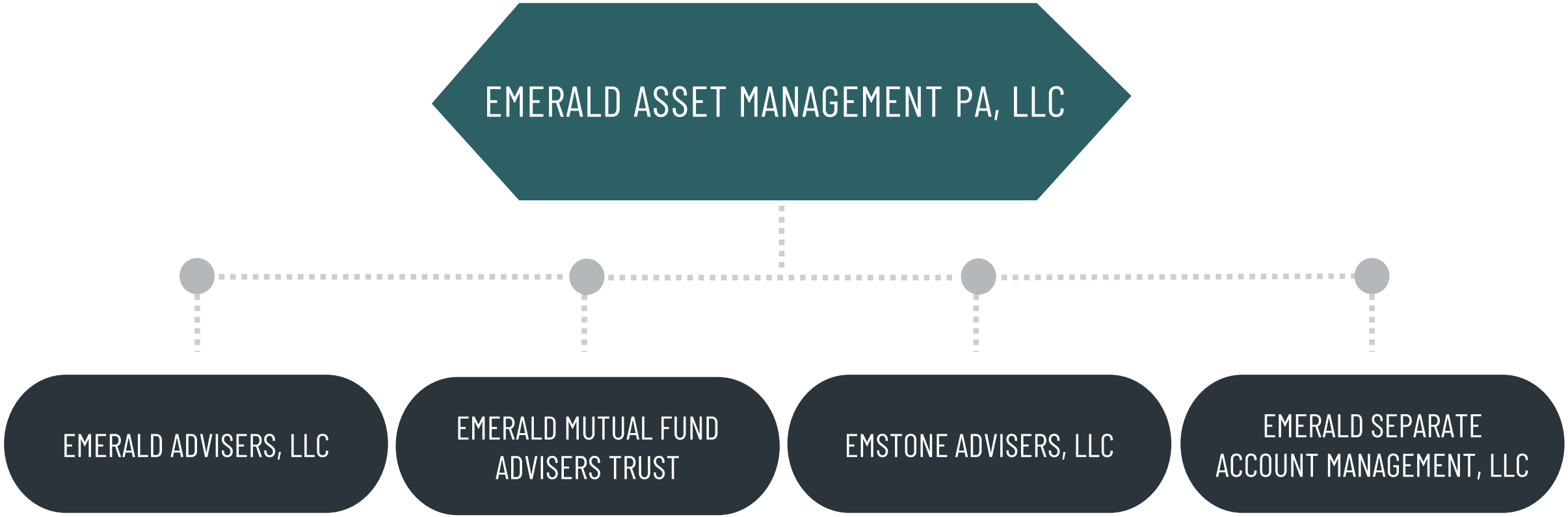
Emerald Asset Management PA, LLC

Incorporated in November 1991

$4.0 Billion Firm-Wide Assets Under Management as of March 31, 2023

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CORPORATE PROFILE



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PARTIAL CLIENT LIST

15 YEARS AVERAGE CLIENT TENURE*

PUBLIC	CORPORATE	ENDOWMENTS	TAFT-HARTLEY	SUB-ADVISORY RELATIONSHIPS
Commonwealth of PA	Independence Blue Cross	Lower Susquehanna Synod of the ELCA	UFCW Tri-State Pension Fund	Empower
Contra Costa County (CA)	Shands Healthcare	Shippensburg University Foundation	Port Authority of Allegheny County/ Amalgamated Transit Union 85	Prudential Investments
State of Illinois Teachers'				
12 Pennsylvania Counties				

*It is not known whether the clients approve or disapprove of Emerald services provided through its subsidiaries. Emerald did not use performance-based data to determine which clients are included on this list. Clients were selected based upon their general name recognition and as a representative sampling of the types of accounts managed. *As of December 31, 2022. Includes institutional client tenure of Emerald Advisers, LLC and Emerald Mutual Fund Advisers Trust.*

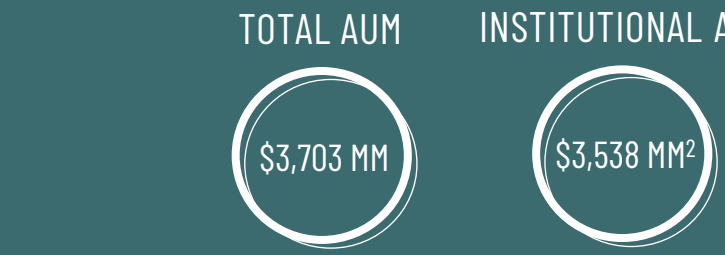
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STRATEGY SNAPSHOT

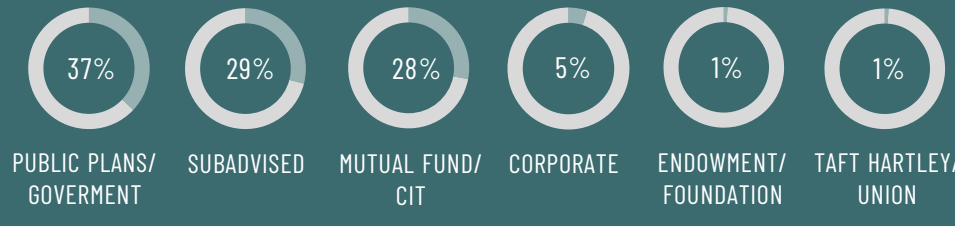
AS OF
MARCH 31, 2023

OBJECTIVE: Long-term growth of capital by delivering alpha during both up and down markets.[1]

Assets Under Management in Diversified SCG Strategy:



Account Breakdown



PRODUCT INCEPTION	October 1, 1992
NUMBER OF HOLDINGS	110-120
AVERAGE POSITION	½ - 2%
WEIGHTED AVERAGE MARKET CAP	$3,245 mm
EST. 3-5 YEAR EPS GROWTH RATE[3]	25.4%

[1] There can be no assurance that the Adviser will achieve its objective. [2] Institutional accounts include all sub-advised accounts, collective investment trust accounts, institutional separate accounts and institutional accounts in the Emerald Growth Fund as of 03/31/2023. [3] The estimated 3-5 year earnings growth rate is calculated utilizing a pre-calculated mean long-term EPS growth rate estimate for portfolio holdings, as available, provided by FactSet and sourced from brokerage estimate submissions to estimate services (FactSet, IBES, First Call, etc.). The estimated 3-5 year earnings growth rate for the portfolio is then calculated utilizing the weighted average of the individual portfolio holding estimated 3-5 year earnings growth rates. The data reported is as of the report date. Estimated 3-5 year EPS growth rates may not correspond to future returns achieved by the portfolio or any particular security in it and are merely presented to show that the manager's bias is towards those positions that are projected to have a superior EPS growth rate to those of the index as a whole. Portfolio characteristics are subject to change periodically and may not be representative of current characteristics.

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THE EMERALD ADVANTAGE

EMERALD DEMONSTRATES AN ONGOING COMMITMENT TO **"THE FIVE P'S"** THAT HAVE BEEN EMBEDDED IN ITS CORPORATE CULTURE SINCE ITS FOUNDING IN 1992.



PEOPLE

- Emerald's Small Cap Growth portfolio management team has 100 years collective experience;* together since 1994
- Teamwork Environment: 14 analysts with 18 years average tenure at Emerald and 22 years average industry experience*



PHILOSOPHY

- Active management works to uncover opportunities in small-cap markets
- We work to maximize return and minimize risk by capitalizing on inherent inefficiencies



PROCESS

- Disciplined focus grounded by Emerald's 10-Step Research Process
- Focused and consistent investment style adhering to growth and small-cap mandates
- Emerald's entrepreneurial culture seeks to generate alpha by discovering and exploiting trends
- Demonstrated ability to invest (when risk/reward is appropriate) in the pre-profit Biotech Industry and all pre-profit companies



PERSISTENCE

- Remaining true to our fundamental, bottom-up process irrespective of market cycles
- Demonstrated by the Firm's 30-year record of portfolio attribution*



PERFORMANCE

- Emerald seeks to provide competitive long-term performance and upside/downside market capture

**As of December 31, 2022*

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INVESTMENT PHILOSOPHY

RESEARCH-DRIVEN ACTIVE PORTFOLIO MANAGEMENT

- Top line & bottom line growth drives stock values higher
- Seek to maximize returns and minimize risks by capitalizing on the inefficiencies inherent in small-cap markets
    - 1,084 Russell 2000 stocks have five or fewer sell-side analysts, while 379 stocks have two or fewer (Source: FactSet as of 4/4/2023)
- Dedicated to fundamental, bottom-up research designed to identify unrecognized, under-researched companies
- In-house fundamental investment research is the key to outperforming benchmark market indices
- Industry & scientific expertise across all sectors

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RESEARCH INEFFICIENCY

Analysis of Sell-Side Analyst Coverage

April 4, 2023

	S&P 500	Russell Mid Cap	Russell 2000
Average # of Sell-Side Analysts Per Stock	18.8	13.5	5.6
Stocks with >= 20 Sell-Side Analysts	216	141	10
% of Total	*42.94%*	*17.32%*	*0.52%*
Stocks with <= 5 Sell-Side Analysts	10	83	1,084
% of Total	*1.99%*	*10.20%*	*56.43%*
Stocks with <= 2 Sell-Side Analysts	2	20	379
% of Total	*0.40%*	*2.46%*	*19.73%*
Total # of Stocks	503	814	1,921

Source: FactSet Research Systems

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TEAM EMERALD*

14 INVESTMENT PROFESSIONALS | **18** YRS. AVG. TENURE | **22** YRS. AVG. INDUSTRY EXPERIENCE



KENNETH G. MERTZ II, CFA

CHIEF INVESTMENT OFFICER
PORT. MGR. - SCG & BANKING
COVERAGE: FINANCIAL SERVICES
30 YRS. TENURE



STACEY L. SEARS, MBA

PORT. MANAGER - SCG
COVERAGE: CONSUMER
30 YRS. TENURE



JOSEPH W. GARNER, MBA

DIRECTOR OF RESEARCH
PORT. MANAGER - SCG
COVERAGE: CONSUMER GOODS, TECHNOLOGY, TRANSPORTATION
28 YRS. TENURE



DAVID VOLPE, CFA, MA

DEPUTY CIO (EA), PRESIDENT (EAM)
PORT. MANAGER - ACG & MCG
COVERAGE: ENERGY
22 YRS. TENURE



STEVEN E. RUSSELL, ESQ. MBA

PORT. MANAGER - BANKING
COVERAGE: FINANCIALS, BANKS, REITS
21 YRS. TENURE



STEPHEN AMSTERDAM

PORT. MANAGER - ACG & MCG
COVERAGE: SEMICONDUCTORS, TECHNOLOGY, GAMING
21 YRS. TENURE



ORI ELAN, MBA

RESEARCH ANALYST
COVERAGE: INSURANCE, REITS
7 YRS. TENURE



SCOTT BLUMENTHAL, MBA

DIR. OF INDUSTRIALS RESEARCH
COVERAGE: MATERIALS, INDUSTRIALS, CAP. GOODS, ENGINEERING, DEFENSE, AEROSPACE, CONSTRUCTION
18 YRS. TENURE



DEREK FISHER

DIR. OF TECHNOLOGY RESEARCH
COVERAGE: TECHNOLOGY, PROFESSIONAL SERVICES
26 YRS. TENURE



NISHIT TRIVEDI, PhD, MBBS, MBA

DIR. OF LIFE SCIENCES RESEARCH
COVERAGE: MOLECULAR DIAGNOSTICS, HOSPITALS, MEDICAL DEVICES
16 YRS. TENURE



TERRY M. SMITH PhD, MBA

DIR. OF LIFE SCIENCES RESEARCH
COVERAGE: BIOTECH, DRUGS & PHARMA., MANAGED CARE
16 YRS. TENURE



NATHAN R. JONES, PhD, MBA

SENIOR RESEARCH ANALYST
COVERAGE: TECHNOLOGY
9 YRS. TENURE



PETER GARNER

RESEARCH ANALYST
COVERAGE: TRANSPORTATION, TECHNOLOGY, CONSUMER
2 YRS. TENURE



ERIK CIANCI

RESEARCH ANALYST
COVERAGE: INDUSTRIALS, TECHNOLOGY, CONSUMER
2 YRS. TENURE

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*As of December 31, 2022

INVESTMENT RESEARCH PROCESS

EMERALD'S RESEARCH TEAM FOCUSES ON PROVIDING FUNDAMENTAL RESEARCH AND ANALYSIS OF INVESTMENT OPPORTUNITIES, UTILIZING ITS **10-STEP** PROPRIETARY PROCESS INITIATED IN 1992.*

10-STEP PROCESS

1



REVIEW SEC FILINGS, PRESS RELEASES AND NEWS STORIES

The process includes monitoring relevant media sources such as industry press, financial press and popular press.

2



MEET WITH MANAGEMENT

Meet with management across the organization in areas such as executive management, marketing, product development, operations and finance. The Emerald Research Team conducts approximately 2,000 meetings per year on-site at the company, or off-site at conferences, trade shows or other locations. Emerald also leverages the use of adaptable video-conferencing capabilities when such on-site meetings are not feasible.

3



INTERVIEW CUSTOMERS

Interview customers to determine:

(1) the critical factors driving their buy decision,

(2) what competitors or alternatives were considered,

(3) level of satisfaction with the quality of the product or service, and

(4) likelihood of generating repeat business.

4



INTERVIEW COMPETITORS

Interview competitors to determine their strengths and weaknesses, as well as the competitors' perception of the strengths and weaknesses of the company.

5



INTERVIEW SUPPLIERS

Interview suppliers to determine their ability to supply the products/services required by the company. Also, assess the extent of potential supply chain bottlenecks.

6



INTERVIEW DISTRIBUTORS

Interview distributors to determine potential issues and opportunities in the company's distribution channel such as inventory levels, demand drivers and competitive pressures.

7



DEVELOP FINANCIAL AND VALUATION MODELS

Develop a financial model to analyze financial performance and estimate future cash flows, earnings and financing needs. Use a valuation model to analyze relative and absolute valuation.

8



REVIEW THIRD- PARTY RESEARCH

Review published research from sell-side analysts and industry research firms to compare our data points and financial estimates. Also, use third party research to assess security-specific and industry-specific sentiment.

9



PUBLISH AN INTERNAL RESEARCH REPORT

Publish an internal research report summarizing the company's business, competitive advantages, management strengths/weaknesses, growth drivers and risks, as well as stating investment conclusions and recommendations. Subject to the requirement of the portfolio manager of each strategy.

10



COMMUNICATE, COMMUNICATE, COMMUNICATE

The entire research team formally meets once a week and informally on an ongoing basis with the portfolio management team to discuss the fundamentals of current and potential holdings. Internal discussions are held throughout the process.

**This may not be fully applicable to all industries or investment opportunities.*

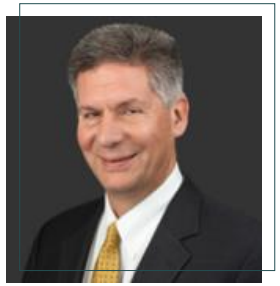
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EMERALD SMALL CAP GROWTH PORTFOLIO MANAGEMENT TEAM

Emerald believes investment team continuity is critical in delivering long term value to our clients.

JOSEPH W. GARNER

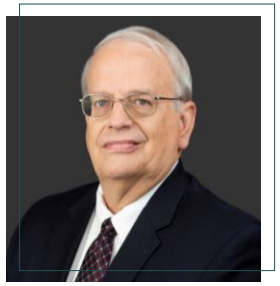
PORTFOLIO MANAGER &
DIRECTOR OF RESEARCH



28 Years Experience*

KENNETH G. MERTZ II, CFA

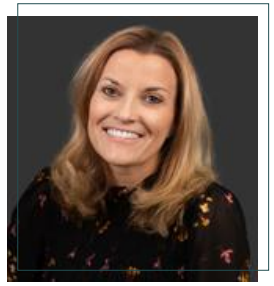
PORTFOLIO MANAGER,
CHIEF INVESTMENT OFFICER



44 Years Experience*

STACEY L. SEARS

PORTFOLIO MANAGER &
SENIOR VICE PRESIDENT



28 Years Experience*

**As of December 31, 2022*

EXPERIENCED INVESTMENT TEAM

- 100 years collective investment experience*
- 28 years working together*

DISCIPLINED FOCUS

- Delivering consistent portfolio performance and characteristics
- True small-cap
- Seeking to find growth across all sectors

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INVESTMENT PROCESS

STOCK SELECTION IS A FUNDAMENTALLY DRIVEN PROCESS



IDEA GENERATION

UNIVERSE

- Universe is Russell 2000
- Capitalization ≤ the largest Russell 2000 company

14-MEMBER TEAM

- Assigned Sector/Industry Coverage
- Expertise/Tenure

10-STEP PROCESS

- Fundamentally driven
- Bottom-up focus
- Meetings with management
- Written reports generated for the majority of stocks. Subject to the requirement of the portfolio manager of each strategy.



STOCK SELECTION PROCESS

BUY CRITERIA

- Competitive advantages
- Leadership position
- Strong management
- Growth rate exceeds peer group
- Differentiated growth drivers
- Under-researched by the Street

BUY DECISION

- Valuation deemed attractive relative to defined growth prospects
- Security fits within portfolio risk constraints



PORTFOLIO CONSTRUCTION

☑ DIVERSIFIED PORTFOLIO

- 110-120 stocks
- Sector & industry diversification

☑ UNEQUAL WEIGHTED

AT THE STOCK LEVEL

- Position sizes range ½ - 2%
- Stock specific risk/cross-risk/correlation

AT THE SECTOR/INDUSTRY LEVEL

- Sector/industry weights are a fallout of the bottom-up investment process

ABILITY TO PARTICIPATE IN A BROADER OPPORTUNITY SET THAN OUR PEERS

☑ RISK-MANAGEMENT/CONTROLS

SECTOR	INDUSTRY	STOCK
≤ 3x R-2000 Index (max. 45%)	≤ 25%	≤ 5% holding size
(if sector is ≤ 2%: up to max. 5%)		≤ 5% ownership in company

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City of Fort Pierce
PERFORMANCE (GROSS)

AS OF
MARCH 31, 2023

RATE OF RETURN REPORTED GROSS

GROSS PERFORMANCE	QTD	YTD	1 Year*	3 Year*	5 Year*	Incept**
City of Fort Pierce	4.19	4.19	-11.26	15.07	6.43	9.71
RUSSELL 2000G TOTAL RETURN***	6.07	6.07	-10.60	13.36	4.26	7.78

**Annualized **Since Inception-Mar 17, 2004 ***Source: FTSE Russell – see full disclosure.*

Performance Disclaimer - The performance information reflected is approved for "One-on-One" client presentations only. The performance figures do not reflect the deduction of investment fees; the investment advisory fees are described in Part II of Emerald Advisers' Form ADV. This includes all reinvestment of dividends. Past performance is no guarantee of future results. Results vary so that a client may show a profit or loss in their account depending upon the market conditions and specific portfolio performance.

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City of Fort Pierce
PERFORMANCE (GROSS)

AS OF
MARCH 31, 2023

RATE OF RETURN REPORTED GROSS

	MARKET VALUE ($)	TOTAL	RUSSELL 2000G TOTAL RETURN*
Monthly			
March	6,979,370	-2.91	-2.47
February	7,188,829	-1.66	-1.08
January	7,308,138	9.14	9.95
December	6,709,281	-5.89	-6.42
November	7,129,201	2.15	1.63
October	6,979,063	10.96	9.49
September	6,302,048	-8.38	-9.00
August	6,878,205	-0.35	-0.94
July	6,901,620	9.49	11.20
June	6,315,566	-8.69	-6.19
May	6,916,573	-2.70	-1.89
April	7,108,201	-10.11	-12.27
Quarterly			
1stQtr2023	6,979,370	4.19	6.07
4thQtr2022	6,709,281	6.67	4.13
3rdQtr2022	6,302,048	-0.03	0.24
2ndQtr2022	6,315,566	-20.13	-19.25

		MARKET VALUE ($)	TOTAL	RUSSELL 2000G TOTAL RETURN*
Yearly				
2023	YTD	6,979,370	4.19	6.07
2022		6,709,281	-23.80	-26.36
2021		8,875,808	4.92	2.83
2020		8,527,262	38.22	34.63
2019		8,987,498	30.66	28.48
2018		7,734,396	-10.81	-9.31
2017		8,757,957	29.11	22.17
2016		6,823,790	10.32	11.32
2015		6,921,673	4.91	-1.38
2014		7,733,365	8.29	5.60
2013		8,178,646	50.62	43.30
2012		5,753,631	18.54	14.59
2011		4,894,644	-0.23	-2.91
2010		5,870,649	29.73	29.09
2009		5,224,800	34.89	34.47
2008		3,105,499	-36.22	-38.54
2007		4,913,104	2.93	7.05
2006		6,252,795	13.01	13.35
2005		5,567,745	9.79	4.15
2004	YTD	5,114,889	6.05	8.26
Cumulative			**484.73**	**315.33**
Annualized			**9.71**	**7.78**

*Source: FTSE Russell – see full disclosure.

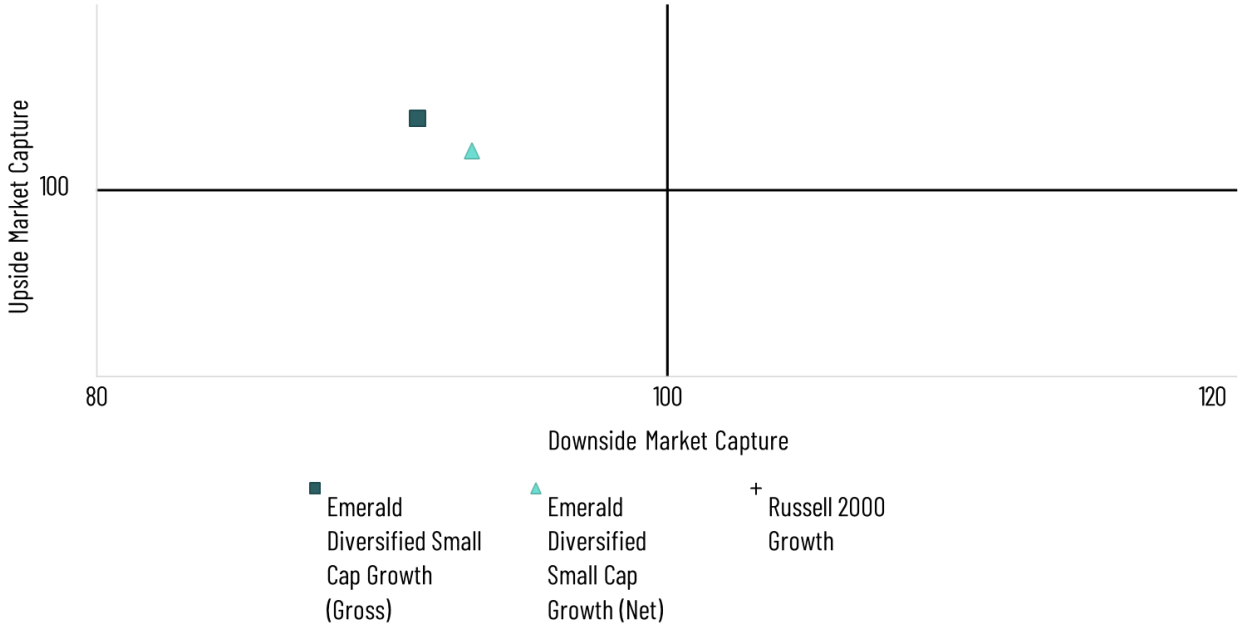
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MARKET CAPTURE SINCE INCEPTION

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023



Product Name	Upside Market Return Since Inception	Upside Market Capture Since Inception	Downside Market Return Since Inception	Downside Market Capture Since Inception	R-Squared Since Inception
Emerald Diversified Small Cap Growth (Gross)	43.91	107.83	-32.04	91.22	0.87
Emerald Diversified Small Cap Growth (Net)	42.48	104.31	-32.72	93.16	0.87
Russell 2000 Growth	40.72	100.00	-35.12	100.00	1.00

(Based on Quarterly Returns)

Performance Disclaimer - This includes all reinvestment of dividends. The fee used when computing net returns is 1%. Source: eVestment, Inception: 10/1/92. Definition: **Upside/downside market capture ratio** shows you whether a given fund has outperformed-gained more or lost less than-a broad market benchmark during periods of market strength and weakness, and if so, by how much. (Source: Morningstar)

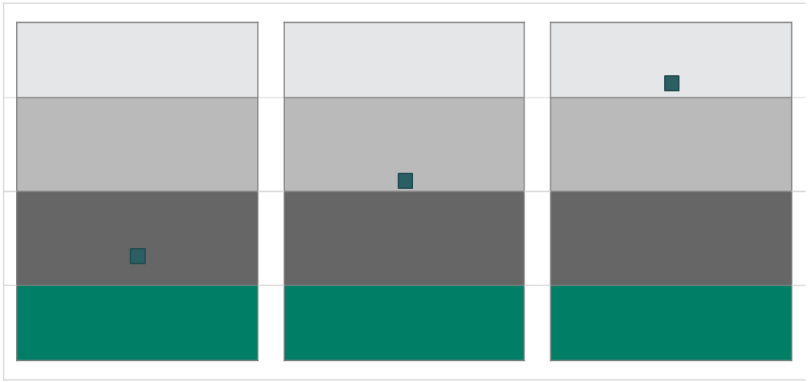
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BATTING AVERAGE (GROSS) - QUARTERLY

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023

RATE OF RETURN REPORTED GROSS



Universe: Small Cap Growth Separate Account Universe (Percentile)

	3 Years	Rk	5 Years	Rk	10 Years	Rk
5th percentile	0.83		0.75		0.70	
25th percentile	0.67		0.70		0.63	
Median	0.58		0.60		0.60	
75th percentile	0.50		0.55		0.53	
95th percentile	0.41		0.45		0.48	
# of Observations	139		137		119	
Emerald Diversified Small Cap Growth (Gross)	0.50	67	0.60	47	0.63	21

GROSS RETURNS (Based on Quarterly Returns)

Russell 2000 Growth

Performance Disclaimer - The performance information reflected is approved for "One-on-One" client presentations only. The performance figures do not reflect the deduction of investment fees; the investment advisory fees are described in Part II of Emerald Advisers' Form ADV. This includes all reinvestment of dividends. Source: eVestment, Universe: Small Cap Growth (Separate Account). Definition: **Batting Average** is a measure of a manager's ability to consistently beat the market. It is calculated by dividing the number of months in which the manager beat or matched the fund's primary benchmark index by the total number of months in the period. For example, a manager who meets or outperforms the market every month in a given period would have a batting average of 100. A manager who beats the market half of the time would have a batting average of 50. (Source: Morningstar)

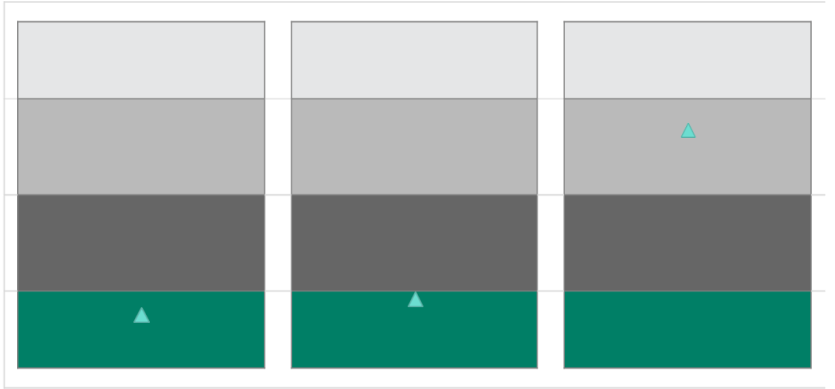
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BATTING AVERAGE (NET) - QUARTERLY

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023

RATE OF RETURN REPORTED NET



Universe: Small Cap Growth Separate Account Universe (Percentile)

	3 Years	Rk	5 Years	Rk	10 Years	Rk
5th percentile	0.75		0.75		0.68	
25th percentile	0.67		0.65		0.60	
Median	0.58		0.60		0.55	
75th percentile	0.50		0.55		0.50	
95th percentile	0.33		0.45		0.45	
# of Observations	124		123		107	
Emerald Diversified Small Cap Growth (Net)	0.42	81	0.50	77	0.57	33

NET RETURNS (Based on Quarterly Returns)

Russell 2000 Growth

Performance Disclaimer - This includes all reinvestment of dividends. The fee used when computing net returns is 1%. Source: eVestment, Universe: Small Cap Growth (Separate Account). Definition: **Batting Average** is a measure of a manager's ability to consistently beat the market. It is calculated by dividing the number of months in which the manager beat or matched the fund's primary benchmark index by the total number of months in the period. For example, a manager who meets or outperforms the market every month in a given period would have a batting average of 100. A manager who beats the market half of the time would have a batting average of 50. (Source: Morningstar)

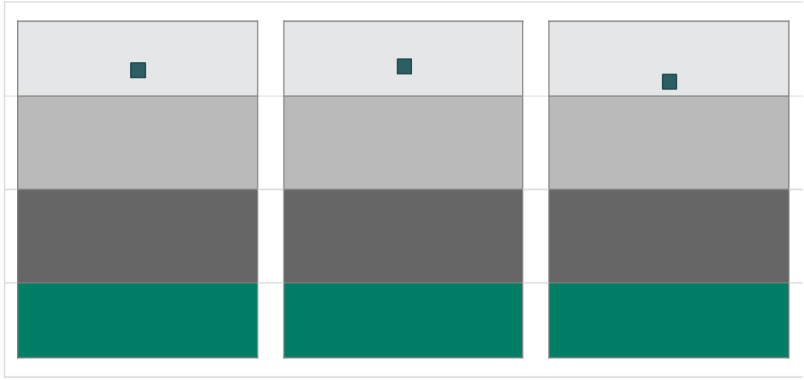
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BATTING AVERAGE (GROSS) - MONTHLY

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023

RATE OF RETURN REPORTED GROSS



Universe: Small Cap Growth Separate Account Universe (Percentile)

	3 Years	Rk	5 Years	Rk	10 Years	Rk
5th percentile	0.67		0.65		0.62	
25th percentile	0.61		0.62		0.58	
Median	0.56		0.58		0.55	
75th percentile	0.50		0.55		0.53	
95th percentile	0.44		0.47		0.47	
# of Observations	139		137		119	
Emerald Diversified Small Cap Growth (Gross)	0.61	18	0.62	17	0.58	21

GROSS RETURNS (Based on Monthly Returns)

Russell 2000 Growth

Performance Disclaimer - The performance information reflected is approved for "One-on-One" client presentations only. The performance figures do not reflect the deduction of investment fees; the investment advisory fees are described in Part II of Emerald Advisers' Form ADV. This includes all reinvestment of dividends. Source: eVestment, Universe: Small Cap Growth (Separate Account). Definition: **Batting Average** is a measure of a manager's ability to consistently beat the market. It is calculated by dividing the number of months in which the manager beat or matched the fund's primary benchmark index by the total number of months in the period. For example, a manager who meets or outperforms the market every month in a given period would have a batting average of 100. A manager who beats the market half of the time would have a batting average of 50. (Source: Morningstar)

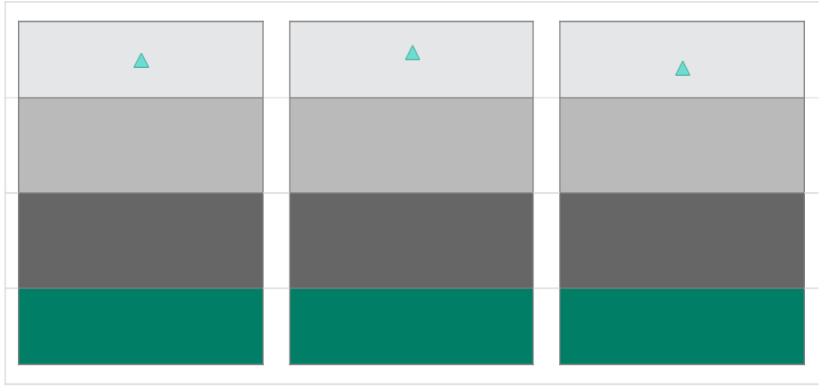
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BATTING AVERAGE (NET) - MONTHLY

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023

RATE OF RETURN REPORTED NET



Universe: Small Cap Growth Separate Account Universe (Percentile)

	3 Years	Rk	5 Years	Rk	10 Years	Rk
5th percentile	0.66		0.65		0.60	
25th percentile	0.61		0.60		0.56	
Median	0.56		0.57		0.53	
75th percentile	0.50		0.53		0.51	
95th percentile	0.44		0.45		0.47	
# of Observations	124		123		106	
Emerald Diversified Small Cap Growth (Net)	0.61	15	0.62	13	0.57	17
Russell 2000 Growth						

NET RETURNS (Based on Monthly Returns)

Performance Disclaimer - This includes all reinvestment of dividends. The fee used when computing net returns is 1%. Source: eVestment, Universe: Small Cap Growth (Separate Account). Definition: **Batting Average** is a measure of a manager's ability to consistently beat the market. It is calculated by dividing the number of months in which the manager beat or matched the fund's primary benchmark index by the total number of months in the period. For example, a manager who meets or outperforms the market every month in a given period would have a batting average of 100. A manager who beats the market half of the time would have a batting average of 50. (Source: Morningstar)

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

- 2023 got off to a blistering start with the broad market indices including the Russell 2000 (+9.75%) and Russell 1000 (+6.70%) posting strong gains in January catalyzed by growing optimism of no landing/soft landing in the domestic economy.

- In February, this enthusiasm transitioned to overheating fears with the market anticipating a return of 50 basis point hikes at the March meeting and a terminal Federal Funds rate of 5.70% (as of 3/8/23).

- The twin failures of Silicon Valley Bank and Signature Bank and the forced sale of Credit Suisse to UBS in March shifted the narrative yet again, sending shockwaves through the financial markets and igniting fears of a 2007-2008 Great Financial Crisis redux.

- Although the panic has since faded as bank deposits have stabilized and wholesale borrowing has slowed, the prospect of a further tightening in lending standards, and more constrained credit availability in the wake of the Federal Reserve's near historic trajectory of interest rate increases and unwavering resolve to blunt inflation, have collectively driven renewed fears of a hard landing in the U.S. economy.

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

Index	March	Q1 2023	TTM
Russell 2000	-4.78%	2.74%	-11.61%
Russell 2000 Growth	-2.47%	6.07%	-10.60%
Russell 2000 Value	-7.17%	-0.66%	-12.96%
Russell 2500	-3.75%	3.39%	-10.39%
Russell 2500 Growth	-1.59%	6.54%	-10.35%
Russell 2500 Value	-5.13%	1.40%	-10.53%
Russell MidCap	-1.53%	4.06%	-8.78%
Russell MidCap Growth	1.38%	9.14%	-8.52%
Russell MidCap Value	-3.15%	1.32%	-9.22%
Russell 1000	3.16%	7.46%	-8.39%
Russell 1000 Growth	6.84%	14.37%	-10.90%
Russell 1000 Value	-0.46%	1.01%	-5.91%
Russell 3000 Growth	6.25%	13.85%	-10.88%
Russell 3000 Value	-0.86%	0.91%	-6.35%

Source: FTSE Russell

- With risk aversion running high, defense again became the best offense.
- Large capitalization stocks surged, with the S&P 500 and Russell 1000 gaining +3.67% and +3.16% respectively for the month of March, and +7.50% and +7.46% for the first quarter.
- This rapid transition in sentiment weighed heavily on small capitalization stocks. After a strong start to 2023 with the Russell 2000 (+7.89%) leading the Russell 1000 (+4.17%) by 372 basis points through the month of February, the Russell 2000 (-4.78%) declined significantly during the month of March.
- The magnitude of March's relative underperformance not only erased the Russell 2000 Index's early year lead, but also flipped the Russell 2000 from a year-to-date leader to a year-to-date laggard with a first quarter return of +2.74%, 472 basis points behind the Russell 1000 (+7.46%).

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
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Russell Sector	March R2000 Growth	Q1 2023 R2000 Growth	TTM R2000 Growth
Technology	1.45%	14.92%	-17.15%
Telecommunications	-1.59%	1.89%	-2.49%
Health Care	-3.56%	0.02%	-15.22%
Financials	-9.56%	0.90%	-20.55%
Real Estate	-4.94%	0.71%	-32.25%
Consumer Discretionary	-0.87%	14.40%	-4.60%
Consumer Staples	1.89%	4.55%	1.55%
Industrials	-2.77%	9.00%	0.14%
Basic Materials	-5.19%	6.26%	-9.06%
Energy	-5.98%	-6.82%	-6.96%
Utilities	2.27%	8.03%	-10.96%

Source: FTSE Russell

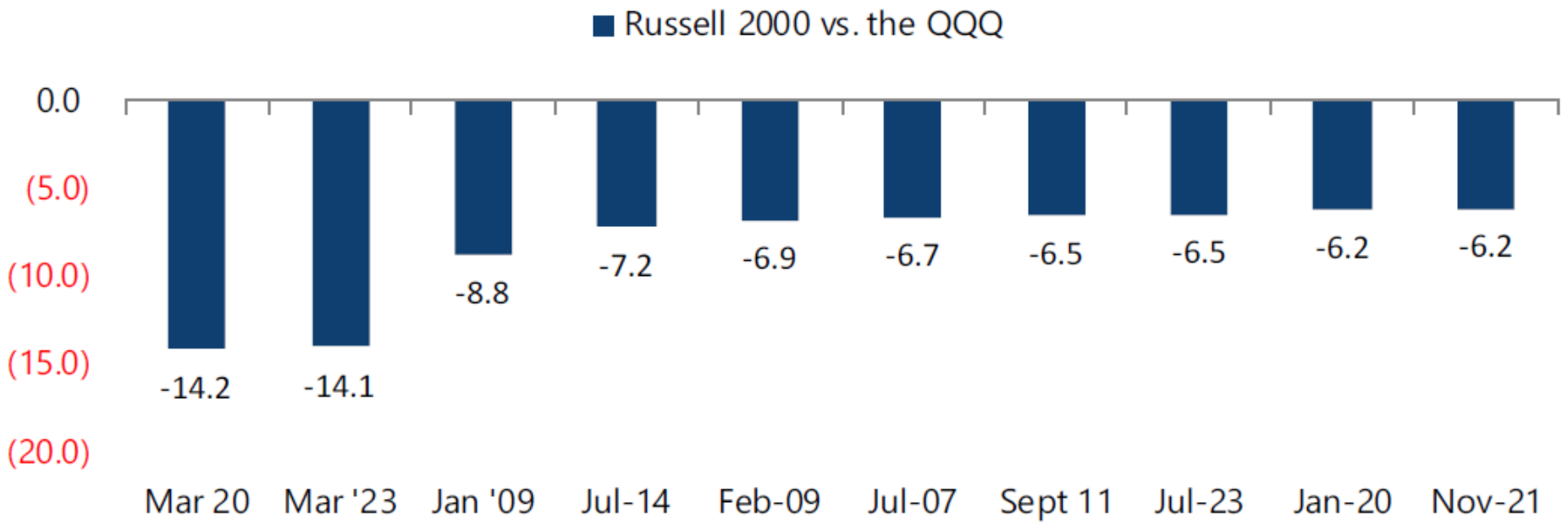
- Underlying the relative strength in large capitalization stocks was a sizeable rotation into the technology sector driven by falling yields and rising recession fears.
- Within the Russell 1000, the technology sector, as defined by the Russell Industry Classification Benchmark according to FactSet, returned +25.25% and contributed more than 600 basis points to the return of the Index.
- Although the technology sector did outperform within the Russell 2000 as well, the sector returned a significantly more modest +13.51% and contributed 137 basis points to the Russell 2000's total return.
- From a style perspective, the outperformance of the technology sector and underperformance of financials drove a resurgence in growth as a style, with the Russell Growth indices outperforming their Value counterparts across the capitalization spectrum.

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1ST QUARTER 2023
PERFORMANCE REVIEW

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- To put the magnitude of this relative underperformance in context, and using the Nasdaq Composite as a proxy, the Russell 2000 (+2.74%) lagged the Nasdaq Composite (+16.77%) for the first quarter by approximately 1,400 basis points, the widest gap of underperformance since March 2020, according to the same report from Steven DeSanctis cited above.



Source: FactSet; FTSE Russell; Jefferies

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

- Although growth as a style outperformed across the market capitalization spectrum, when comparing the composition of returns within the Russell 2000 Growth Index to those of the Russell 1000 Growth Index, there were several noteworthy divergences.

- For example, according to an April 4, 2023 report from Steve DeSanctis of Jefferies, when comparing the performance of the fastest-growing companies as measured by sales growth within the Russell 2000 Growth, the top quintile or fastest growers underperformed the Index overall by 541 basis points, while that same cohort within the Russell 1000 Growth outperformed by 1,120 basis points.

Performance by Sales Growth

	First Quarter 2023								
	Russell 2000			Russell 2000 Growth			Russell 2000 Value		
Sales Growth	Absolute	Contribution	Relative	Absolute	Contribution	Relative	Absolute	Contribution	Relative
Q1 (Best)	0.70	0.13	-2.03	0.66	0.19	-5.41	-1.72	-0.40	-1.07
Q2	3.90	0.82	1.16	9.13	1.90	3.05	-1.55	-0.34	-0.89
Q3	6.07	1.24	3.33	10.97	2.52	4.89	0.29	0.05	0.94
Q4	2.44	0.51	-0.30	7.02	1.35	0.95	-0.01	-0.02	0.65
Q5 (Worst)	1.54	0.27	-1.20	2.12	0.36	-3.96	1.73	0.30	2.38
N/A	-11.04	-0.24	-13.78	-10.52	-0.25	-16.59	-11.57	-0.24	-10.92

Source: FactSet; FTSE Russell; Jefferies

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

Performance by Sales Growth

	First Quarter 2023								
	Russell 1000			Russell 1000 Growth			Russell 1000 Value		
Sales Growth	Absolute	Contribution	Relative	Absolute	Contribution	Relative	Absolute	Contribution	Relative
Q1 (Best)	8.81	1.07	1.34	25.57	2.23	11.20	-1.05	-0.25	-2.06
Q2	4.53	0.97	-2.93	12.03	2.17	-2.34	-1.10	-0.23	-2.11
Q3	8.23	2.34	0.77	10.24	2.57	-4.13	1.22	0.19	0.21
Q4	7.44	1.84	-0.02	10.93	2.83	-3.44	-0.23	0.02	-1.24
Q5 (Worst)	8.42	1.24	0.95	18.46	4.56	4.09	7.34	1.26	6.34
N/A	44.27	0.00	36.80	0.00	0.00	0.00	44.27	0.00	43.26

Source: FactSet; FTSE Russell; Jefferies

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

- There were also interesting differences when viewing performance by P/E quintile. While the highest P/E quintile companies outperformed within both indices, that cohort within the Russell 2000 Growth outperformed by 400 basis points, as compared to the same cohort within the Russell 1000 Growth, which outperformed by 995 basis points.

- Similarly, whereas the non-earnings cohort underperformed by 363 basis points within the Russell 2000 Growth Index, the non-earnings cohort within the Russell 1000 Growth Index outperformed by 287 basis points.

Performance by P/E Quintile

	First Quarter 2023								
	Russell 2000			Russell 2000 Growth			Russell 2000 Value		
P/E Quintile (FY1)	Absolute	Contribution	Relative	Absolute	Contribution	Relative	Absolute	Contribution	Relative
Q1 (Lowest)	1.72	0.16	-1.02	2.80	0.28	-3.28	4.03	0.49	4.69
Q2	-2.49	-0.40	-5.23	7.31	0.91	1.23	-6.92	-1.41	-6.26
Q3	3.46	0.43	0.72	10.57	1.60	4.50	-4.80	-0.77	-4.14
Q4	4.32	0.87	1.58	3.68	0.75	-2.40	1.15	0.34	1.81
Q5 (Highest)	6.22	1.18	3.48	10.10	1.85	4.02	1.91	0.39	2.57
Non	1.79	0.50	-0.95	2.45	0.68	-3.63	0.88	0.30	1.54

Source: FactSet; FTSE Russell; Jefferies

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AS OF
MARCH 31, 2023

Performance by P/E Quintile

	First Quarter 2023								
	Russell 1000			Russell 1000 Growth			Russell 1000 Value		
P/E Quintile (FY1)	Absolute	Contribution	Relative	Absolute	Contribution	Relative	Absolute	Contribution	Relative
Q1 (Lowest)	-3.46	-0.61	-10.92	1.76	0.18	-12.61	-5.13	-1.22	-6.13
Q2	1.96	0.38	-5.50	8.46	1.48	-5.91	0.20	0.15	-0.81
Q3	4.59	0.91	-2.87	14.35	4.61	-0.02	2.71	0.60	1.70
Q4	10.23	3.39	2.77	14.65	3.42	0.28	0.43	0.21	-0.58
Q5 (Highest)	17.74	2.72	10.28	24.32	3.62	9.95	6.77	0.88	5.76
Non	17.21	0.69	9.75	17.24	1.06	2.87	19.71	0.39	18.70

Source: FactSet; FTSE Russell; Jefferies

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

- Interestingly, despite the growing concerns over credit availability and rising recession risks, the more highly leveraged companies within the Russell 2000 Growth performed inline to slightly better than the Index overall, while the more highly leveraged companies within the Russell 1000 Growth underperformed by 373 basis points relative to the Index overall.

Performance by Leverage

	First Quarter 2023								
	Russell 2000			Russell 2000 Growth			Russell 2000 Value		
Leverage	Absolute	Contribution	Relative	Absolute	Contribution	Relative	Absolute	Contribution	Relative
Highest	2.93	1.57	0.19	6.16	3.24	0.09	-0.61	-0.28	0.04
Lowest	2.54	1.17	-0.20	5.97	2.83	-0.10	-0.70	-0.37	-0.05

Source: FactSet; FTSE Russell; Jefferies

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

- Also noteworthy was the distribution of performance by market capitalization. Within the Russell 1000 Growth, the relative outperformance within the Index was concentrated in the largest market capitalization quintile, with this subset returning +15.53% and outperforming by 116 basis points. The remaining four quintiles underperformed the Russell 1000 Growth Index overall.

- Within the Russell 2000 Growth, the smallest market capitalization underperformed by 984 basis points, but unlike the Russell 1000 Growth the largest quintile also underperformed by 45 basis points. Only quintile two within the Russell 2000 Growth demonstrated relative outperformance, outpacing the benchmark overall by 235 basis points.

Performance by Market Cap Quintile

	First Quarter 2023								
	Russell 2000			Russell 2000 Growth			Russell 2000 Value		
Size Quintile	Absolute	Contribution	Relative	Absolute	Contribution	Relative	Absolute	Contribution	Relative
1 (Largest)	3.45	1.81	0.71	5.63	3.01	-0.45	-1.26	-0.58	-0.60
2	2.41	0.56	-0.32	8.42	2.05	2.35	2.88	0.58	3.54
3	4.01	0.53	1.27	5.90	0.78	-0.17	-1.45	-0.21	-0.79
4	-1.73	-0.07	-4.47	4.52	0.29	-1.55	-4.45	-0.29	-3.80
5 (Smallest)	-4.34	-0.09	-7.08	-3.77	-0.05	-9.84	-5.11	-0.15	-4.45

Source: FactSet; FTSE Russell; Jefferies

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Performance by Market Cap Quintile

	First Quarter 2023								
	Russell 1000			Russell 1000 Growth			Russell 1000 Value		
Size Quintile	**Absolute**	**Contribution**	**Relative**	**Absolute**	**Contribution**	**Relative**	**Absolute**	**Contribution**	**Relative**
1 (Largest)	8.47	6.38	1.01	15.53	12.38	1.16	0.61	0.52	-0.39
2	4.27	0.57	-3.19	10.47	1.23	-3.90	0.96	0.14	-0.05
3	4.64	0.28	-2.82	6.79	0.37	-7.58	2.87	0.18	1.86
4	3.56	0.13	-3.90	10.49	0.25	-3.88	3.28	0.12	2.28
5 (Smallest)	6.27	0.11	-1.19	12.54	0.15	-1.83	2.57	0.05	1.56

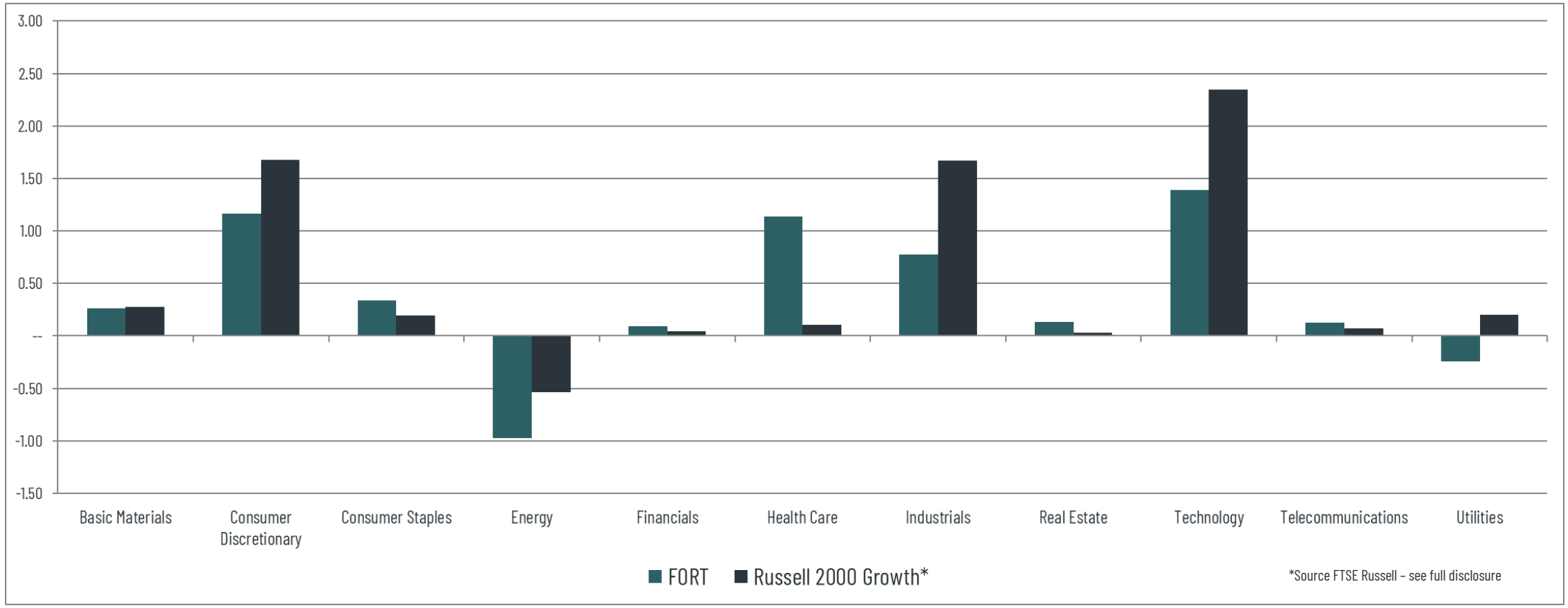
Source: FactSet; FTSE Russell; Jefferies

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

- The Emerald Diversified Small Cap Growth portfolio trailed the Russell 2000 Growth benchmark for the first quarter of 2023.
- The portfolio was challenged by both stock selection and allocation effect as relative outperformance within the healthcare sector was more than offset by relative underperformance within the technology, industrials, consumer discretionary, energy and utilities sectors.



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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

CONTRIBUTORS

The healthcare sector was the portfolio's largest source of positive contribution to return. At the industry level, solid stock selection and relative outperformance within the medical equipment and medical services industries drove the sector's positive contribution to return.

TOP 10 CONTRIBUTORS TO RETURN

Reata Pharmaceuticals, Inc.
NeoGenomics, Inc.
Lantheus Holdings Inc.
Shift4 Payments, Inc.
Super Micro Computer, Inc.
Churchill Downs Inc.
TransMedics Group, Inc.
Freshpet Inc.
PDF Solutions, Inc.
Jack in the Box Inc.

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1ST QUARTER 2023
PERFORMANCE REVIEW

AS OF
MARCH 31, 2023

DETRACTORS

The technology sector was the portfolio's top detractor to return for the quarter. Headwinds were most acute in those industries where the portfolio was underweight, including semiconductors, production technology equipment and software.

Performance within the industrials sector was also challenging resulting from the portfolio's sizeable underweight relative to the benchmark and stock selection within the professional business support and services industry.

Also detracting from performance was stock selection within the consumer discretionary sector and specifically the negative contribution to return from holdings within the specialty retail industry.

Relative performance also proved challenging within the energy and utilities sectors.

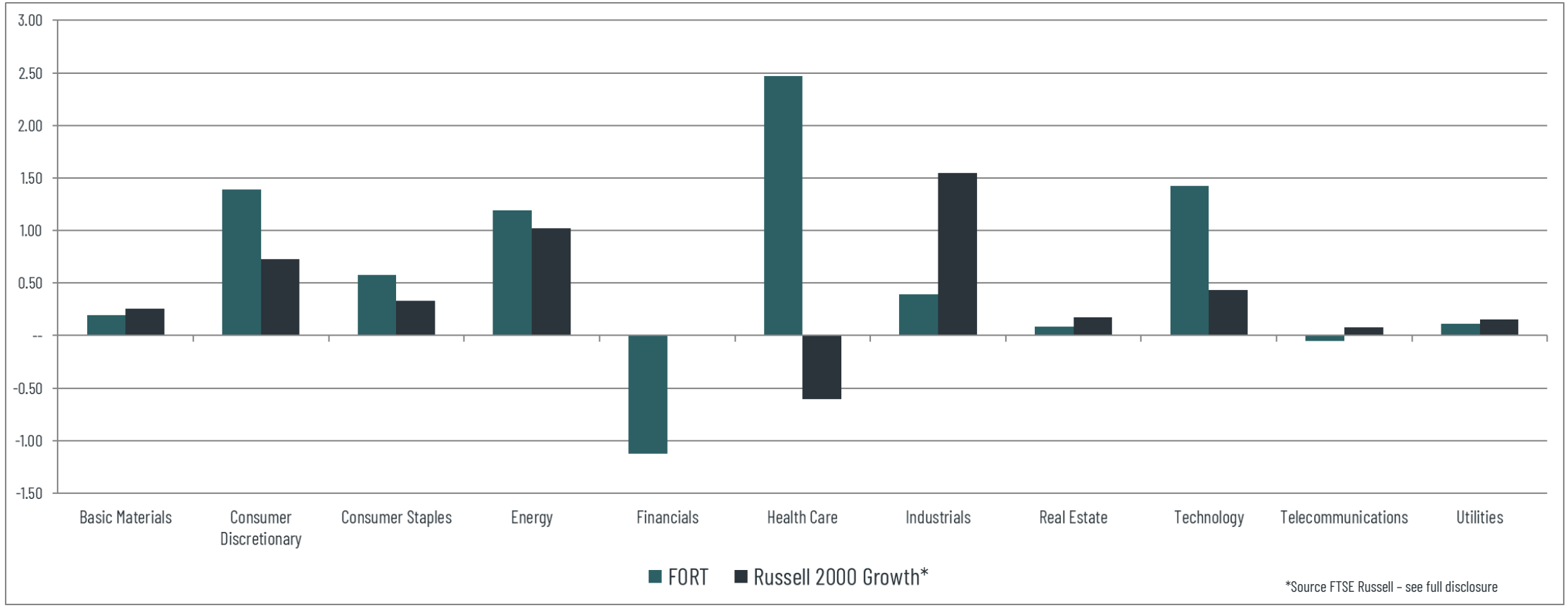
TOP 10 DETRACTORS TO RETURN

National Vision Holdings, Inc.
Replimune Group, Inc.
Cutera, Inc.
AdaptHealth Corp.
NV5 Global Inc.
Pacific Premier Bancorp, Inc.
Amylyx Pharmaceuticals, Inc.
Aris Water Solutions, Inc.
ProFrac Holding Corp.
Cytokinetics, Inc.

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4th QUARTER
PERFORMANCE ATTRIBUTION

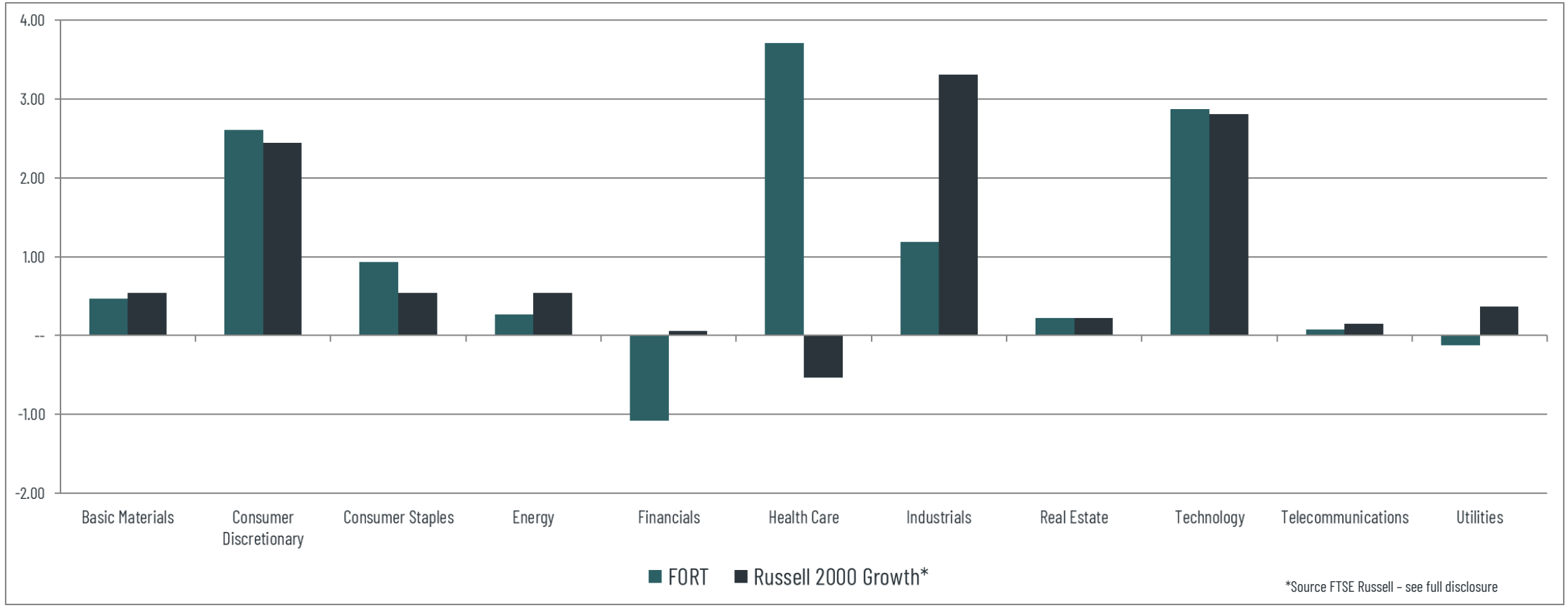
AS OF
DECEMBER 31, 2022



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6 MONTH
PERFORMANCE ATTRIBUTION

AS OF
MARCH 31, 2023



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SECTOR ALLOCATION

AS OF
MARCH 31, 2023

Q4-2022 SECTOR ALLOCATION

Sector	FORT	Russell 2000 Growth*
Basic Materials	**1.3%**	4.1%
Consumer Discretionary	**14.2%**	11.9%
Consumer Staples	**5.4%**	4.0%
Energy	**8.2%**	8.7%
Financials	**7.3%**	5.7%
Healthcare	**31.6%**	22.6%
Industrials	**14.2%**	19.8%
Real Estate	**1.3%**	2.2%
Technology	**11.6%**	16.2%
Telecommunications	**1.0%**	2.3%
Utilities	**2.2%**	2.4%
Cash	**1.7%**	0.0%

Q1-2023 SECTOR ALLOCATION

Sector	FORT	Russell 2000 Growth*
Basic Materials	**1.5%**	4.2%
Consumer Discretionary	**14.1%**	13.0%
Consumer Staples	**5.5%**	4.0%
Energy	**6.0%**	7.8%
Financials	**6.1%**	5.5%
Healthcare	**30.9%**	21.0%
Industrials	**13.9%**	20.3%
Real Estate	**1.4%**	2.1%
Technology	**14.7%**	17.5%
Telecommunications	**0.9%**	2.3%
Utilities	**1.1%**	2.5%
Cash	**3.8%**	0.0%

*Source: FTSE Russell – see full disclosure. Holdings and weightings are subject to change at any time and are not recommendations to buy or sell a security. Red and green shading indicates negative and positive weighting changed 0.5% or greater from previous quarter.

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TOP 10 HOLDINGS

City of Fort Pierce

BY MARKET VALUE AS OF MARCH 31, 2023

	Company	Ticker	Sector	% Held
1.	Churchill Downs, Inc.	CHDN	Consumer Discretionary	2.16%
2.	Super Micro Computer, Inc.	SMCI	Technology	2.14%
3.	Simply Good Foods Co.	SMPL	Consumer Staples	2.12%
4.	Lantheus Holdings, Inc.	LNTH	Healthcare	2.10%
5.	Shift4 Payments, Inc.	FOUR	Industrials	2.10%
6.	Treace Medical Concepts, Inc.	TMCI	Healthcare	1.76%
7.	Freshpet, Inc.	FRPT	Consumer Staples	1.71%
8.	TransMedics Group, Inc.	TMDX	Healthcare	1.67%
9.	Planet Fitness, Inc.	PLNT	Consumer Discretionary	1.59%
10.	Carpenter Technology Corp.	CRS	Materials	1.56%

Holdings and weightings are subject to change at any time and are not recommendations to buy or sell a security.

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PORTFOLIO CHARACTERISTICS VS. BENCHMARK

AS OF
MARCH 31, 2023

Characteristic	Emerald Diversified SCG	Russell 2000 Growth*
Est. 3-5 Year EPS Growth Rate**	**25.4%**	19.3%
P/E Ratio (using FY1)***	**18.1x**	15.3x
R^2 vs. Russell 2000 Growth (1 Year)	**0.97**	1.00
Yield (%)	**0.48**	0.70
Price/Book Value***	**3.5x**	3.5x
Median Market Cap (By No. of Stocks)	**$2,416 mm**	$1,178 mm
Weighted Average Market Cap	**$3,245 mm**	$3,351 mm
Turnover (Trailing 12 mos.)	**49%**	--

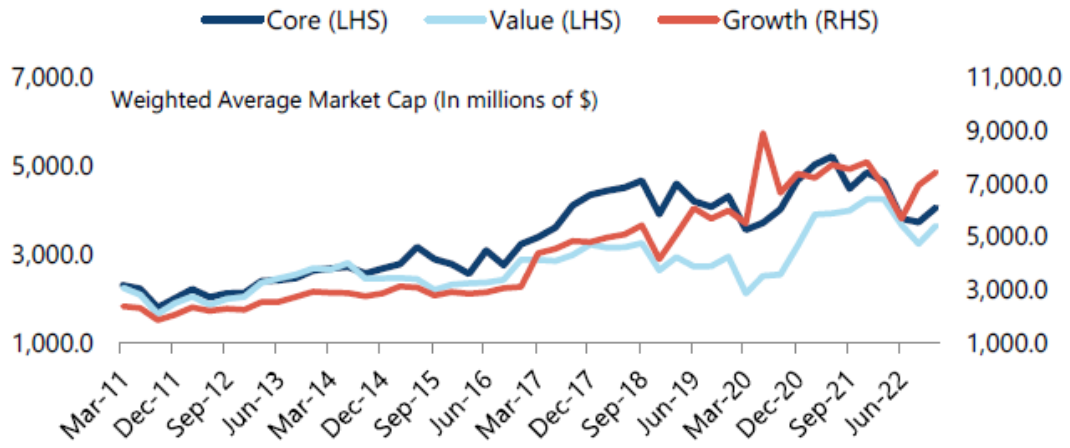
*Source FTSE Russell – see full disclosure. **The estimated 3-5 year earnings growth rate is calculated utilizing a pre-calculated mean long-term EPS growth rate estimate for portfolio holdings, as available, provided by FactSet and sourced from brokerage estimate submissions to estimate services (FactSet, IBES, First Call, etc.). The estimated 3-5 year earnings growth rate for the portfolio is then calculated utilizing the weighted average of the individual portfolio holding estimated 3-5 year earnings growth rates. The data reported is as of the report date. Estimated 3-5 year EPS growth rates may not correspond to future returns achieved by the portfolio or any particular security in it and are merely presented to show that the manager's bias is towards those positions that are projected to have a superior EPS growth rate to those of the index as a whole. ***In order to better reflect Emerald's characteristics relative to the Russell Indices, Emerald is now calculating its P/E and Price/Book ratios based on a weighted harmonic average in line with Russell's calculation methodology. Portfolio characteristics are subject to change periodically and may not be representative of current characteristics. Diversification does not assure a profit or protect against loss.

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PEER COMPARISON

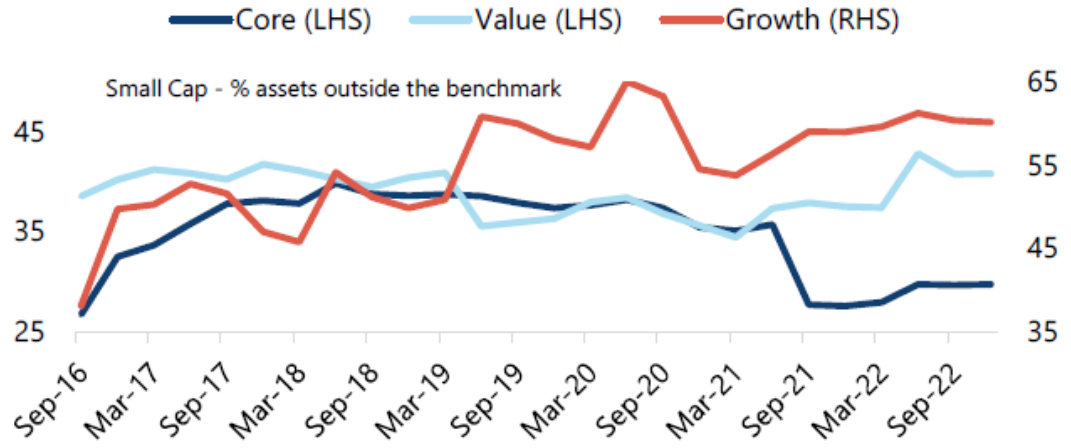
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Chart 7 - Weighted-average cap for Growth back above $7B, $4B for Core, and $3.6B for Value



Source: FactSet; FTSE Russell; Lipper; Jefferies

Chart 8 - Names held outside the index has stayed constant last few quarters



Source: FactSet; FTSE Russell; Lipper Analytical Services; Jefferies

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- Recession fears return to the forefront. After a strong start to 2023, driven by stronger than expected economic data, domestic economic growth is again showing signs of deceleration.

- The Atlanta Fed GDP Now first quarter 2023 forecast has decelerated from the 3.2% expected at the end of February to 1.5% as of April 5 as recent high frequency economic indicators (ISM services, ISM manufacturing, construction spending) have proven weaker than expected.

- Financial conditions have tightened meaningfully over the last 12 months with the Federal Reserve of San Francisco's Proxy Federal Funds rate (a measure of the effective Fed Funds rate adjusted for quantitative tightening) reaching 6.27% as of March 31, 2023, a level not witnessed since the fall of 2000.

- Given the significant level of monetary tightening already working through the financial system and conditions poised to tighten further as lending standards adjust to reflect recent stresses in the banking system, we believe the Federal Reserve has done its job.

- Economic growth is decelerating, inflationary measures are showing signs of exhaustion, job gains are slowing, job openings are declining, wage pressures are easing, and corporate earnings are being revised lower. All these factors, in our opinion, should provide sufficient grounds for the Federal Reserve to pause its pace of Federal Funds rate hikes.

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- A pause in pace of rate hikes may not be enough in the near-term to give the market comfort as the Fed Funds Futures curve is currently pricing in three cuts this year (August, October and November) and five rate cuts in 2024.

- The bond market has similarly priced in a more dire economic outlook, with the two-year treasury yield moving from more than 5% to approximately 4% over the last four weeks.

- Therefore, while we ultimately expect the Federal Reserve policy transition to be a positive for the market, in the short-term the tug-of-war between the soft landing and recession narratives and ongoing fluctuations in treasury yields and Fed Funds futures curve is likely to continue to create a choppy and volatile backdrop for both the equity and bond markets.

- Not to mention residual fears of credit contagion within commercial real estate market, the looming debt-ceiling deadline and more persistent geopolitical tensions, which have the potential to add consternation to this already challenging market backdrop.

- Consequently, we believe the defensive posture of the market assumed in March is likely to persist blunting what we believed was the start of a mean reverting outperformance cycle for small capitalization stocks.

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2023 Earnings Growth

	Small Caps			Mid Caps			Large Caps		
GICS Sector	**Current**	**12/31**	**Difference**	**Current**	**12/31**	**Difference**	**Current**	**12/31**	**Difference**
Comm Serv	16.8	7.1	9.6	-22.8	-22.6	-0.2	9.4	6.9	2.4
Discretionary	-21.9	-15.5	-6.5	-10.9	-8.5	-2.4	20.6	28.4	-7.8
Staples	0.8	8.9	-8.1	12.7	13.3	-0.6	1.5	2.5	-1.1
Energy	62.4	76.9	-14.5	-24.7	2.0	-26.7	-21.0	-15.1	-5.9
Financials	13.2	14.2	-1.0	11.2	14.0	-2.8	8.8	10.2	-1.4
Health Care	-24.2	14.9	-39.1	3.5	8.1	-4.6	-10.2	-5.9	-4.3
Industrials	-14.1	-7.3	-6.7	-7.5	-4.6	-2.8	9.8	10.9	-1.1
Info Tech	-13.3	2.6	-15.8	-4.7	0.6	-5.3	-2.2	2.5	-4.7
Materials	13.5	7.7	5.7	-35.1	-35.9	0.9	-19.3	-15.5	-3.9
Real Estate	-2.0	-4.8	2.8	0.4	4.3	-4.0	7.2	7.1	0.1
Utilities	14.1	16.2	-2.0	13.6	8.3	5.3	7.9	4.9	3.0
Universe	**-2.4**	**3.7**	**-6.1**	**-7.1**	**-2.6**	**-4.5**	**-0.1**	**2.7**	**-2.9**
Univ. X-Energy	**-6.4**	**-0.3**	**-6.1**	**-5.5**	**-3.0**	**-2.5**	**2.3**	**4.8**	**-2.5**
Growth	**-5.2**	**2.4**	**-7.6**	**-7.9**	**-0.5**	**-7.3**	**3.7**	**6.3**	**-2.6**
Value	**-1.1**	**3.1**	**-4.2**	**-8.3**	**-3.6**	**-4.7**	**-1.8**	**1.0**	**-2.8**

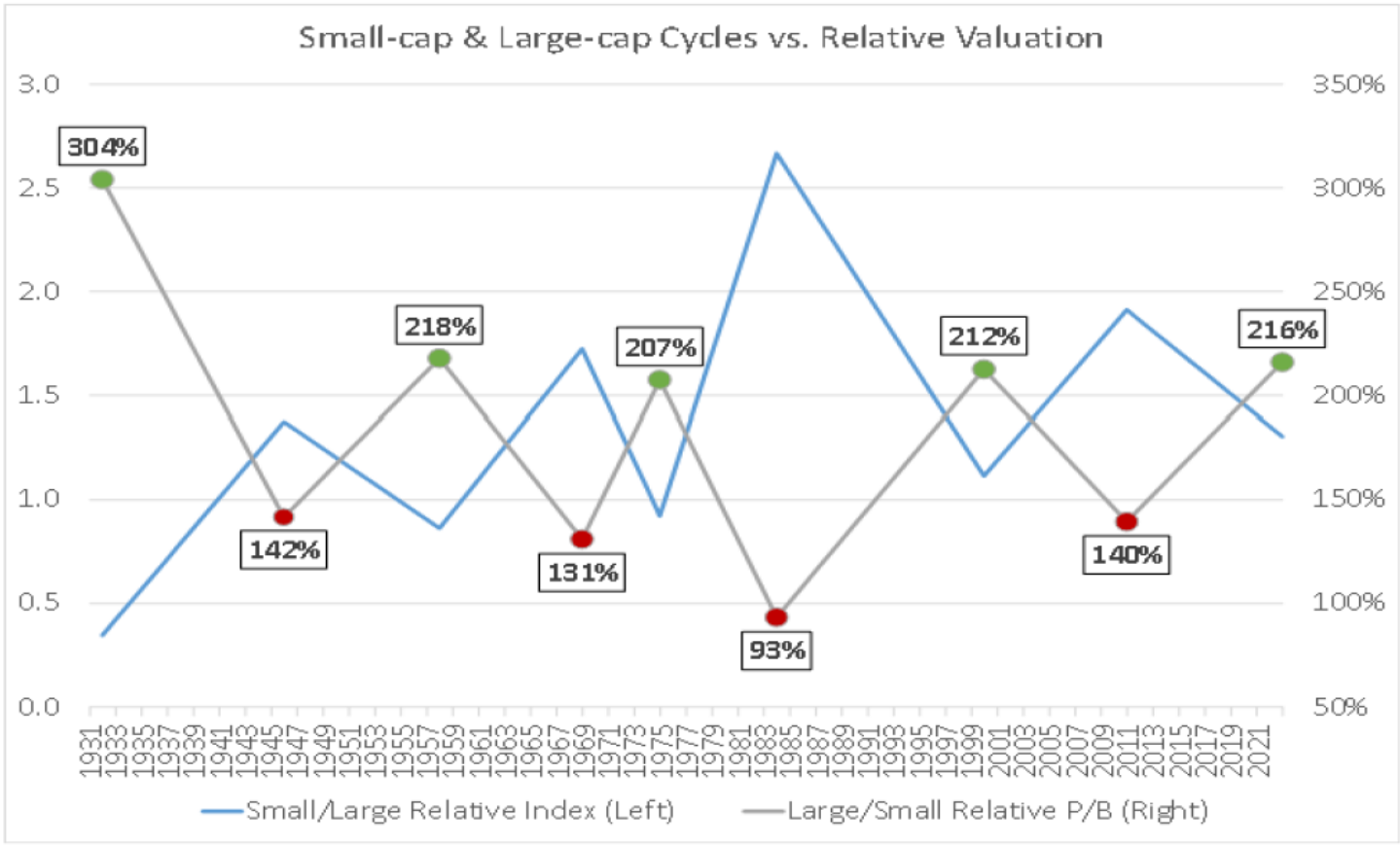
Note: As of March 31.
Source: FactSet; Standard & Poor's; Jefferies.

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- While the path in the short-term has been muddled by the reverberation of stresses in the banking system, over the long-term we continue to believe that after six consecutive years of relative underperformance for small capitalization stocks that a reversion to the mean is inevitable.



Source: FRP, FactSet; as of 12/31/22

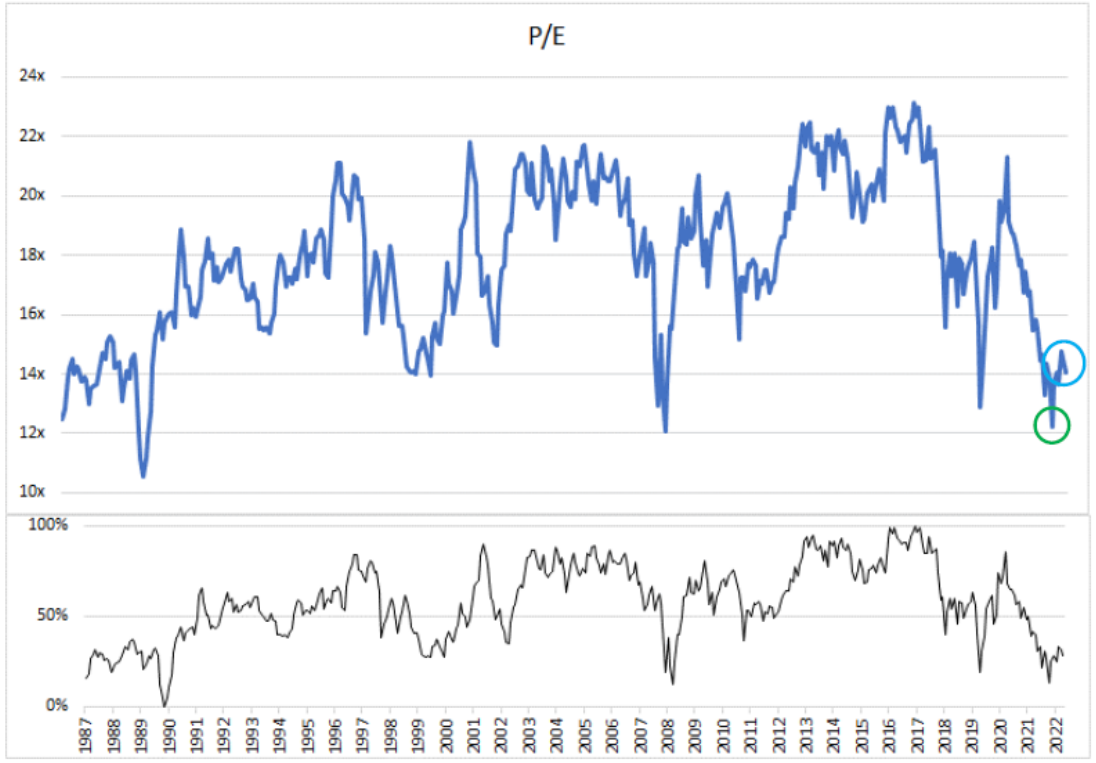
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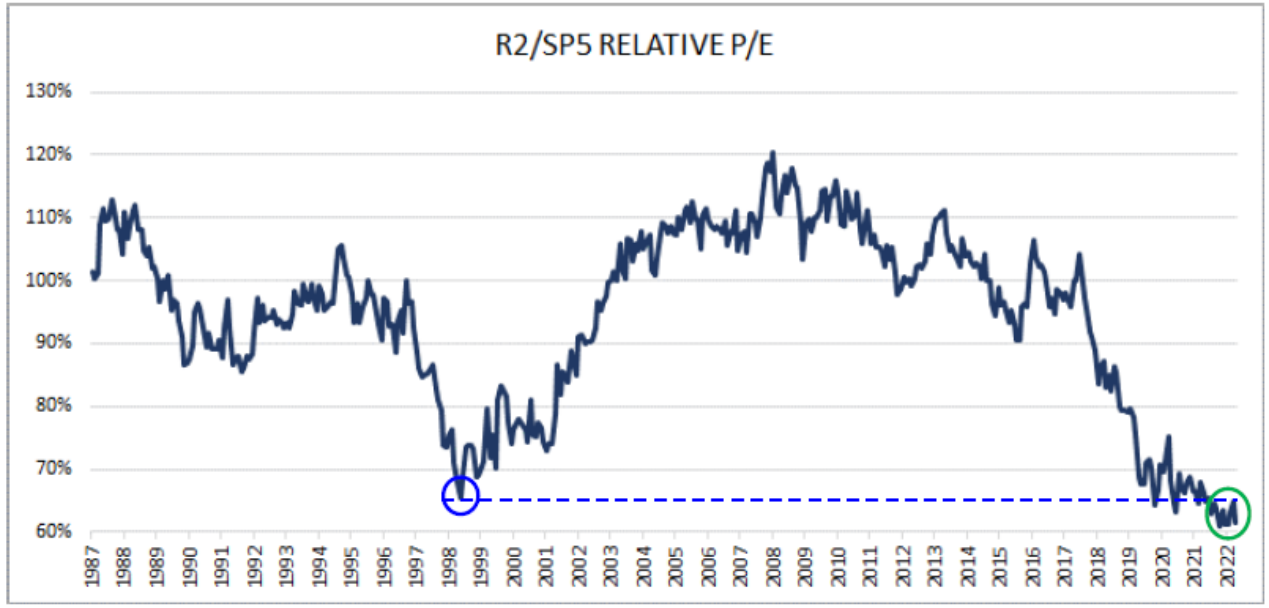
- Small cap valuations on an absolute basis and relative to both the S&P 500 and Russell 1000 remain at a significant discount to the long-term averages.

Fig 96. **Valuation, on a trailing P/E basis, is trading -21% below median**



Source: Furey Research Partners and FactSet. Data as of 3/31/23. Represents median P/E using latest available trailing 12-month earnings. Profitable companies only.

Fig 97. **Relative to large-caps, small-caps have never been more attractive than of late**



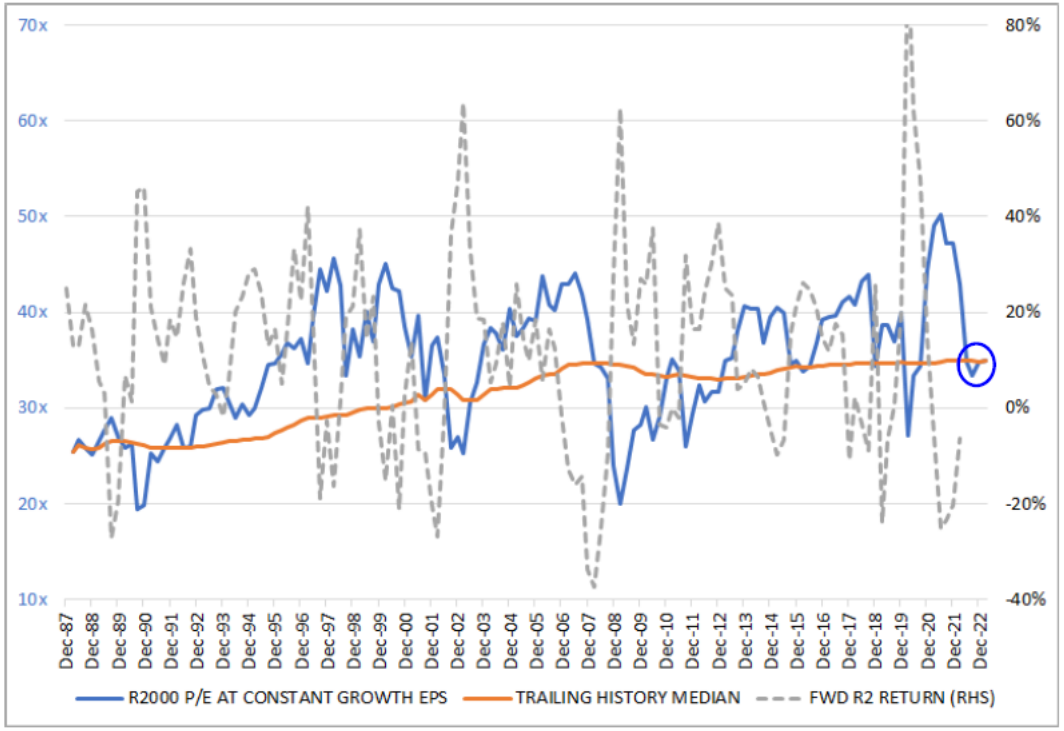
Source: Furey Research Partners and FactSet. Data as of 3/31/23. Represents median P/E using latest available trailing 12-month earnings. Profitable companies only.

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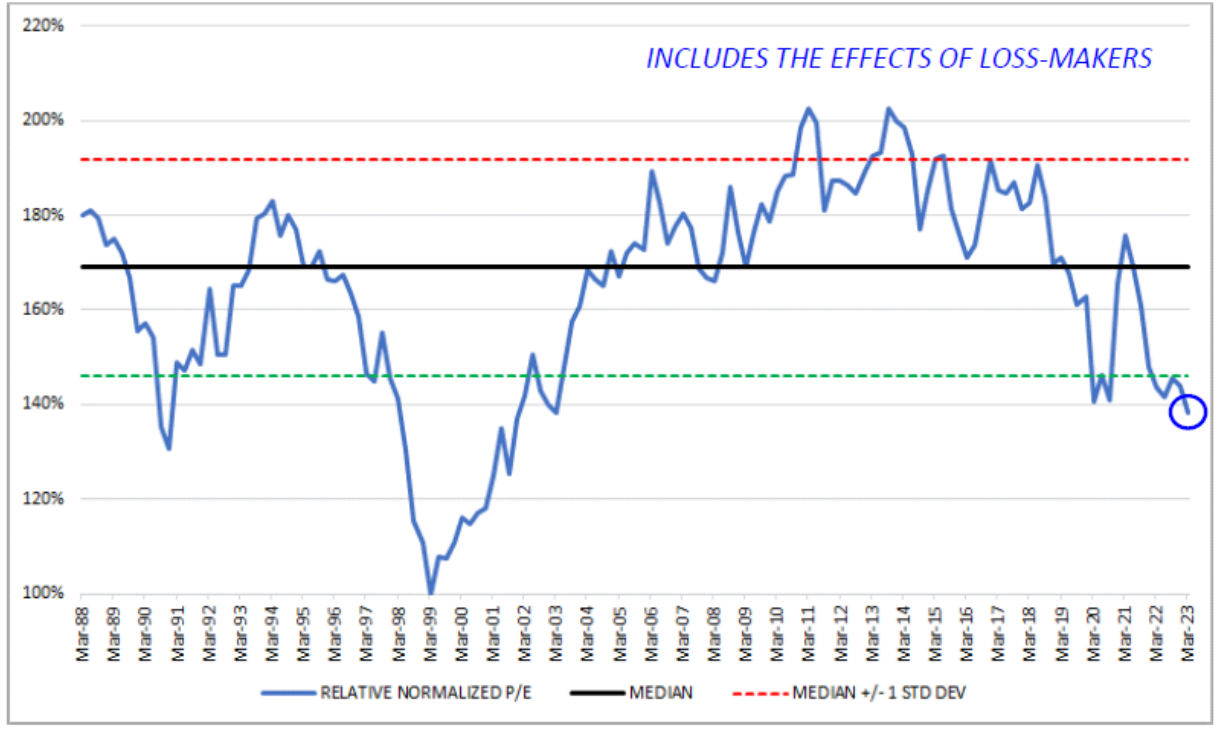
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Fig 99. **R2000 Normalized P/E**



Source: Furey Research Partners and FactSet. Data as of 3/31/23. Based upon our capitalized losses earnings model which includes loss-makers' effects.

Fig 100. **R2000 vs. S&P 500 RELATIVE Normalized P/E**



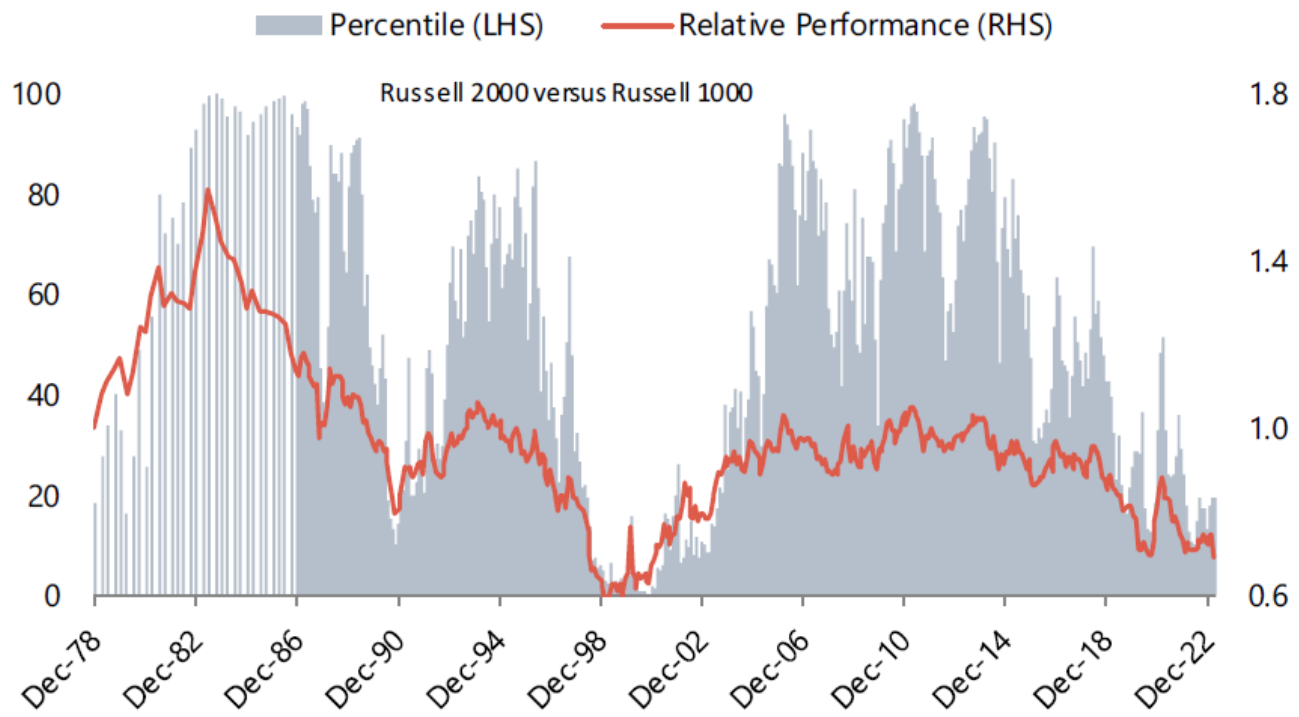
Source: Furey Research Partners and FactSet. Data as of 3/31/23. Based upon our capitalized losses earnings model which includes loss-makers' effects.

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Relative valuation model still sits in Q1 at the 19th percentile



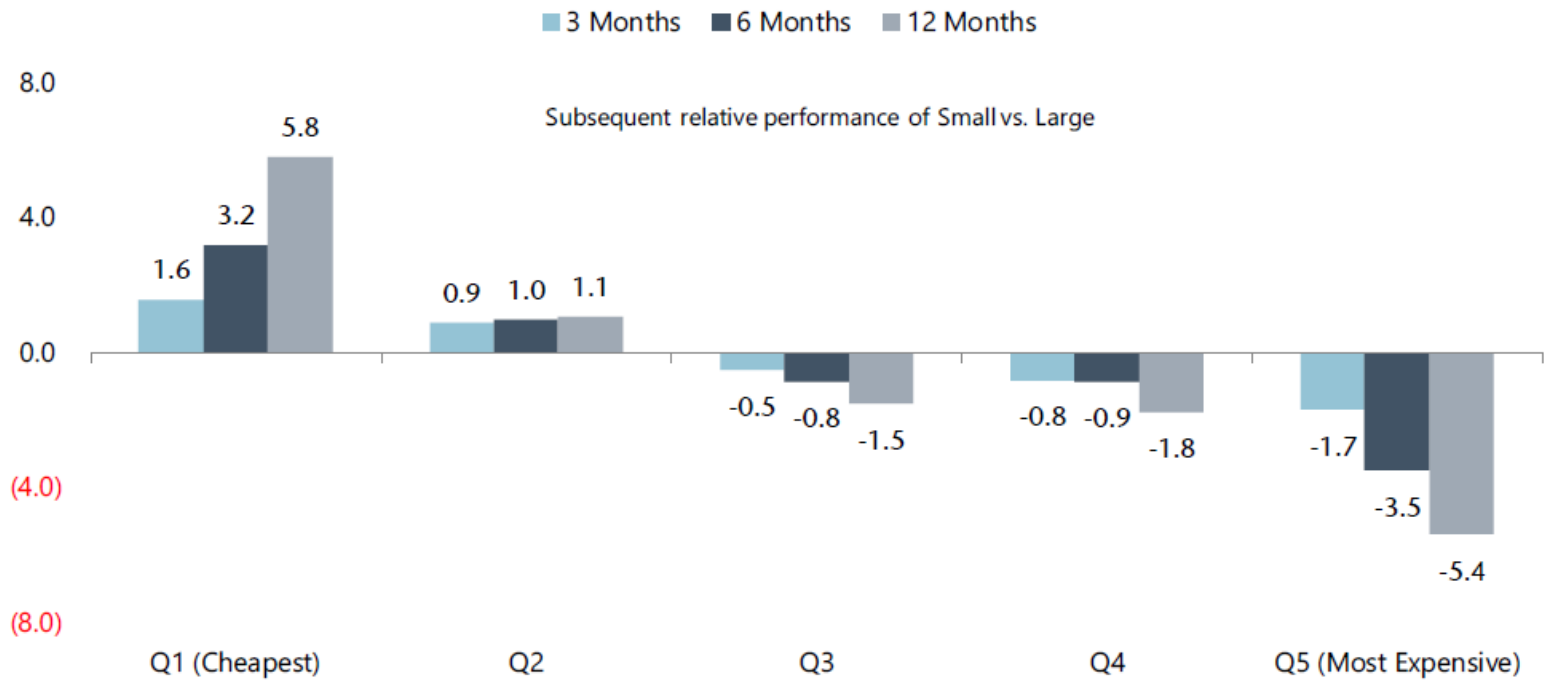
Note: Relative valuation model consists of relative Trailing and Forward P/E, Price to Book, Price To Sales and from 2002 Price to Cash Flow; from March 31, 2016 forward Jefferies' estimates.
Source: FactSet; FTSE Russell; Jefferies

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Relative performance based on valuation models



Note: Relative valuation model consists of relative Trailing and Forward P/E, Price to Book, Price To Sales and from 2002 Price to Cash Flow; from March 31, 2016 forward Jefferies' estimates.
Source: FactSet; FTSE Russell; Jefferies

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- Further, we believe we are closer to the end of the Federal Reserve tightening cycle as discussed above and according to a January 4th report from Furey Research, the Russell 2000, exiting the last six hiking cycles beginning in 1984, has posted positive forward returns on a median basis at 6 months, 12 months and 24 months annualized of +16.4%, +21.0% and +12.1%, respectively.

Fig 33. **Small-cap forward returns after the Fed stops hiking have generally been good**

Date Fed	Forward R2 Return (%)		
Stopped Hiking	6m	12m	24m (Ann.)
Jul-84	22.0	30.6	23.7
Feb-89	15.8	4.0	3.8
Feb-95	20.1	28.7	20.3
May-00	(5.8)	5.7	2.5
Jun-06	9.4	16.4	(1.2)
Dec-18	17.0	25.5	22.7
Average	**13.1**	**18.5**	**12.0**
Median	**16.4**	**21.0**	**12.1**

Source: FRP, FactSet; as of 12/31/22

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- In addition, high and decelerating inflation has historically provided a strong backdrop for small capitalization outperformance, as has small capitalization performance exiting a bear market and recessions.

	Annual Return			3Y Returns Annualized			5Y Returns Annualized		
	Large	**Mid**	**Small**	**Large**	**Mid**	**Small**	**Large**	**Mid**	**Small**
CPI >3	8.5	10.2	10.4	9.0	11.4	11.6	10.3	12.7	13.0
CPI <3	16.1	17.5	19.0	13.7	14.2	14.9	12.0	12.6	13.1
CPI >3, Rising This Year	3.1	2.5	1.7	8.9	11.1	10.9	8.7	11.0	11.1
CPI >3, Declining This Year	**19.1**	**25.9**	**28.5**	**8.5**	**11.3**	**12.5**	**12.4**	**15.3**	**16.3**
CPI <3, Rising This Year	14.0	15.7	16.8	12.5	13.5	14.9	11.4	12.4	13.5
CPI <3, Declining This Year	17.7	18.8	20.7	14.6	14.7	14.8	12.5	12.7	12.7
Overall	**12.7**	**14.3**	**15.2**	**11.6**	**12.9**	**13.4**	**11.2**	**12.6**	**13.0**

Source: FactSet; FTSE Russell; Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business; Jefferies

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Fig 22. **Returns from small-cap bear market bottoms are exceptionally strong**

R2 Bear Market		Price Chg.	R2 Absolute Price Change (%)			R2 Price Change Relative to SP5 (%)		
Start	Bottom	From Peak (%)	Fwd. 6M	Fwd. 1Y	Fwd. 2Y (A)	Fwd. 6M	Fwd. 1Y	Fwd. 2Y (A)
02/08/80	03/27/80	(26.7)	60.1	75.2	20.7	29.1	38.1	14.0
06/15/81	08/12/82	(29.2)	62.1	92.4	30.6	20.6	34.7	4.9
06/24/83	07/25/84	(26.0)	18.7	30.5	23.3	(0.4)	1.8	(3.2)
08/25/87	10/28/87	(39.1)	36.5	39.7	26.6	23.9	19.1	5.4
10/09/89	10/31/90	(34.0)	45.7	54.0	28.9	20.5	24.7	11.4
04/21/98	10/08/98	(36.9)	32.7	37.7	25.6	(8.9)	(1.5)	4.4
03/09/00	10/09/02	(46.1)	13.9	59.4	32.9	1.7	25.7	12.6
10/09/07	03/09/09	(59.4)	66.2	95.1	55.0	16.0	26.5	15.2
04/23/10	07/06/10	(20.5)	35.3	42.6	17.8	11.6	12.5	2.2
04/29/11	10/03/11	(29.6)	37.0	37.9	33.0	8.4	6.4	9.0
06/23/15	02/11/16	(26.4)	28.9	45.6	25.0	9.4	19.0	4.5
08/31/18	12/24/18	(27.2)	19.8	32.4	25.9	(4.1)	(4.7)	0.6
02/20/20	03/18/20	(41.6)	56.6	128.8	44.3	15.4	65.5	8.7
11/08/21	06/16/22	(32.5)						
		Average	**39.5**	**59.4**	**30.0**	**11.0**	**20.6**	**6.9**
		Median	**36.5**	**45.6**	**26.6**	**11.6**	**19.1**	**5.4**

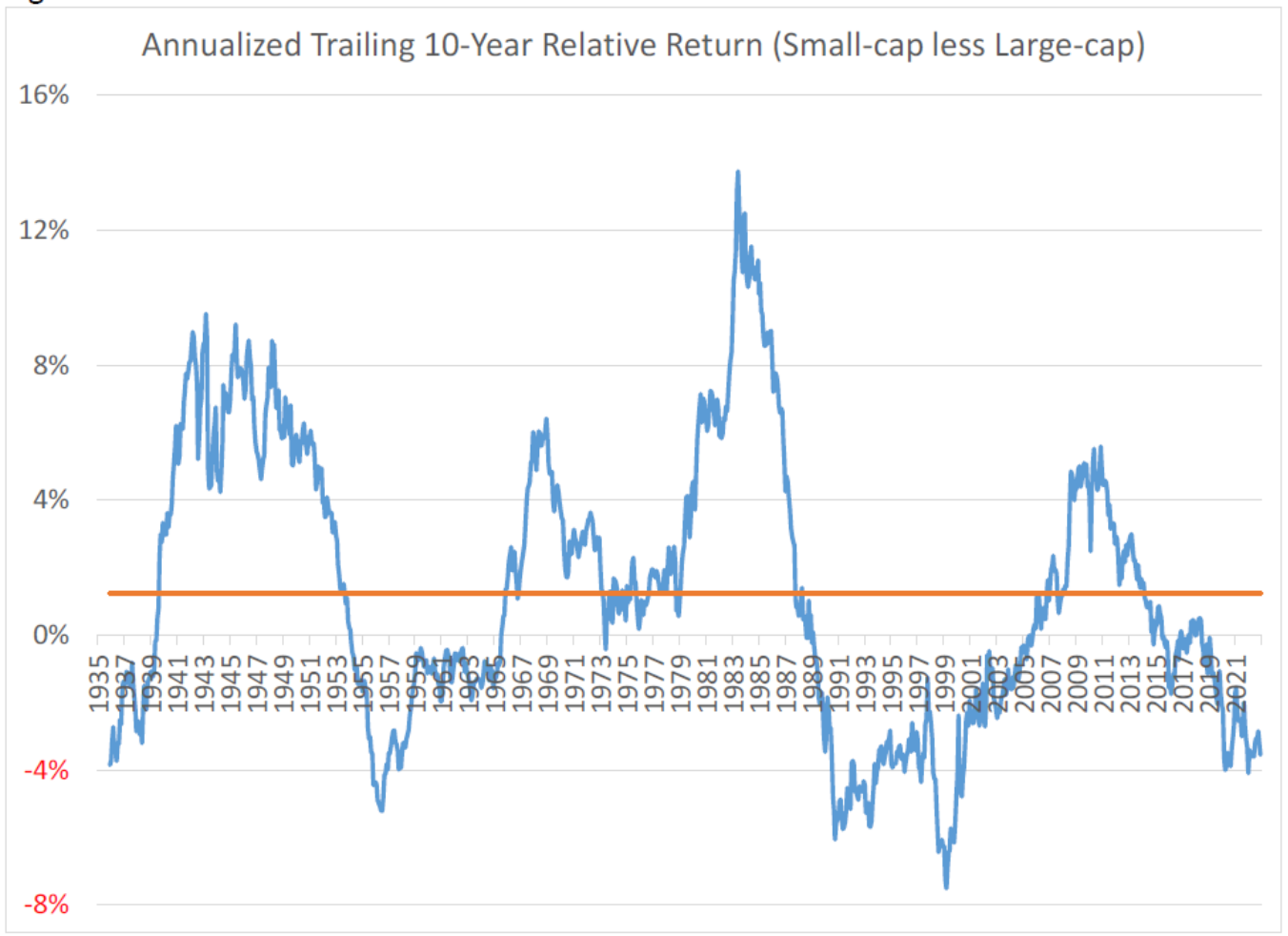
Source: FRP, FactSet; as of 6/30/22

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Fig 40. **Reversion to the mean is inevitable**



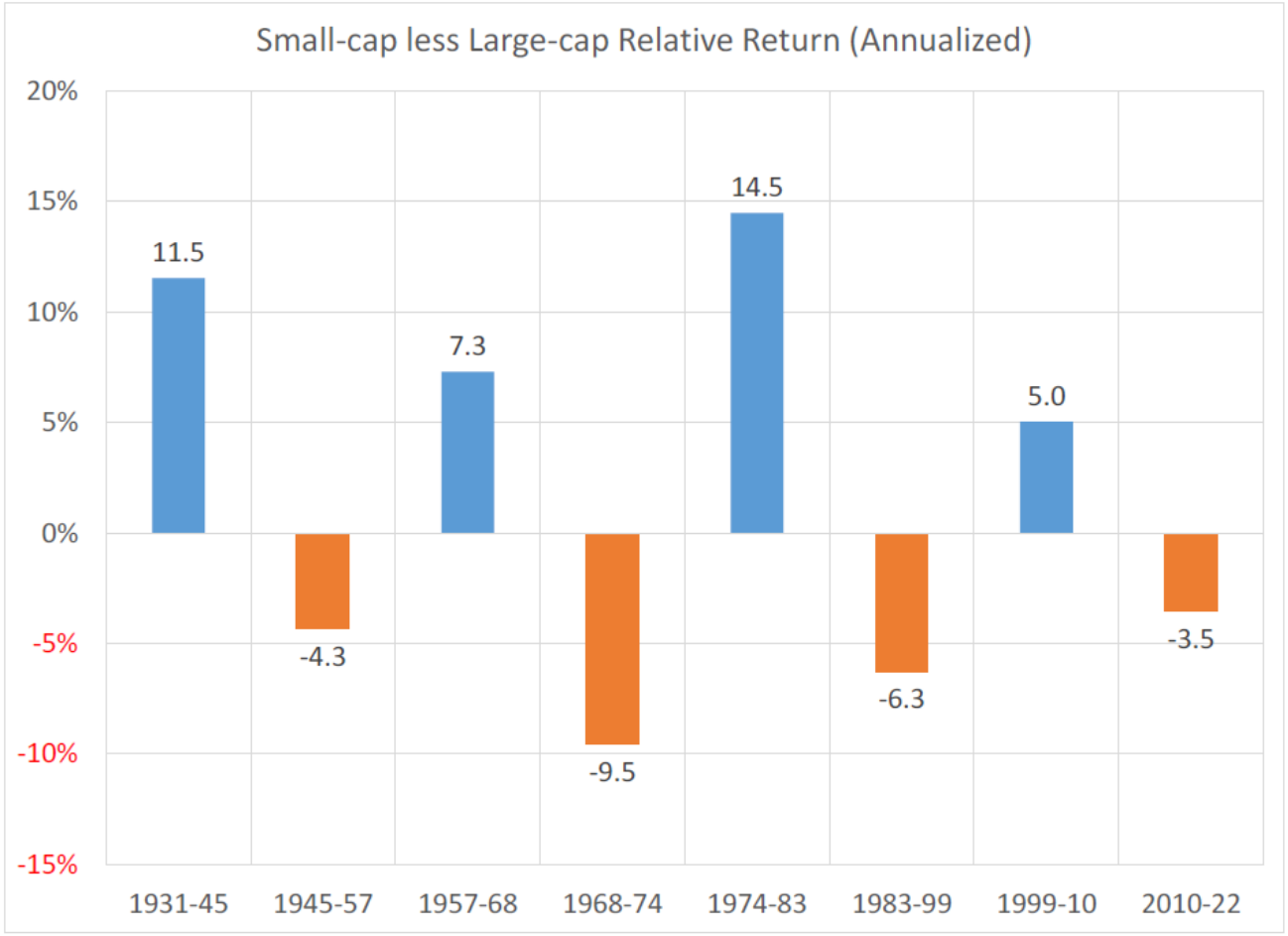
Source: FRP, FactSet; as of 12/31/22

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Fig 41. **Small-cap cycles can be quite powerful**



Source: FRP, FactSet; as of 12/31/22

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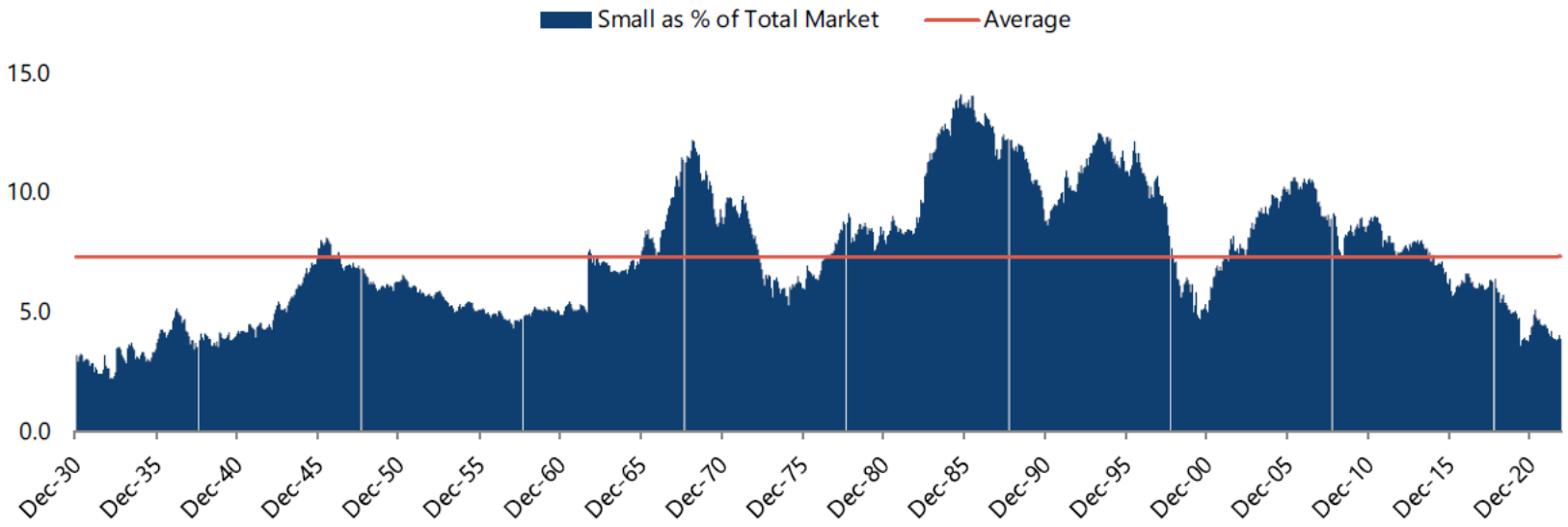
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- Lastly, small capitalization representation of the overall equity market has receded to less than 4%, meaningfully below its historical average of 7% according to an April 4, 2023 report from Steve DeSanctis of Jefferies.

- Emerald remains optimistic that the small capitalization market leadership that began in earnest in January of 2023 is poised to resume as the market gains greater clarity on the forward path for economic growth.

Small less than 4% of US market



Source: FactSet; FTSE Russell; Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business; Jefferies

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PORTFOLIO HOLDINGS

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		Cost Basis		Market Value					Estimated
	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
Cash/Cash Equivalent									
LIQUID ASSETS			**262,685.39**		**262,685.39**	**3.8**	**0.0**	**0.00**	**0**
PRINCIPAL CASH			262,685.39		262,685.39	3.8	0.00	0.00	0.00
TOTAL Cash/Cash Equivalent			**262,685.39**		**262,685.39**	**3.8**	**0.0**	**0.00**	**0**
Equity									
BASIC MATERIALS			**81,313.09**		**104,872.68**	**1.5**	**23,559.6**	**1.79**	**1,874**
CARPENTER TECHNOLOGY CORP	2,343	34.70	81,313.09	44.76	104,872.68	1.5	23,559.59	1.79	1,874.40
CONSUMER DISCRETIONARY			**917,684.83**		**984,839.54**	**14.1**	**67,154.7**	**0.23**	**2,245**
ARHAUS INC	2,031	11.70	23,763.00	8.29	16,836.99	0.2	-6,926.01	0.00	0.00
BJ`S RESTAURANT INC	2,030	47.33	96,088.70	29.14	59,154.20	0.8	-36,934.50	0.00	0.00
CHURCHILL DOWNS INC	564	97.05	54,735.97	257.05	144,976.20	2.1	90,240.23	0.28	402.70
CHUY`S HOLDINGS INC	1,378	25.85	35,623.45	35.85	49,401.30	0.7	13,777.85	0.00	0.00
EVERI HOLDINGS INC	5,415	12.46	67,462.48	17.15	92,867.25	1.3	25,404.77	0.00	0.00
NATIONAL VISION HOLDINGS	2,470	30.00	74,094.06	18.84	46,534.80	0.7	-27,559.26	0.00	0.00
FIVE BELOW	178	48.36	8,607.94	205.97	36,662.66	0.5	28,054.72	0.00	0.00
JACK IN THE BOX INC	1,047	73.44	76,896.21	87.59	91,706.73	1.3	14,810.52	2.01	1,842.72
LINBLAD EXPEDITIONS HOLDINGS	3,357	16.97	56,961.74	9.56	32,092.92	0.5	-24,868.82	0.00	0.00
NOODLES AND COMPANY	4,240	9.41	39,912.15	4.85	20,564.00	0.3	-19,348.15	0.00	0.00
PLANET FITNESS INC	1,372	38.84	53,288.45	77.67	106,563.24	1.5	53,274.79	0.00	0.00
PORTILLOS INC	2,879	20.73	59,684.45	21.37	61,524.23	0.9	1,839.78	0.00	0.00
SEAWORLD ENTERTAINMENT	662	46.30	30,649.09	61.31	40,587.22	0.6	9,938.13	0.00	0.00

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PORTFOLIO HOLDINGS

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		Cost Basis		Market Value					Estimated
	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
SUN COUNTRY AIRLINES HOLDING	2,978	29.99	89,300.53	20.50	61,049.00	0.9	-28,251.53	0.00	0.00
VISTEON CORP	360	116.39	41,901.44	156.83	56,458.80	0.8	14,557.36	0.00	0.00
PETCO HEALTH AND WELLNESS CO	4,340	19.31	83,799.03	9.00	39,060.00	0.6	-44,739.03	0.00	0.00
YETI HOLDINGS INC	720	34.61	24,916.14	40.00	28,800.00	0.4	3,883.86	0.00	0.00
CONSUMER STAPLES			**281,267.06**		**385,469.77**	**5.5**	**104,202.7**	**0.12**	**452**
CELSIUS HOLDINGS INC	845	93.06	78,633.46	92.94	78,534.30	1.1	-99.16	0.00	0.00
FRESHPET INC	1,731	33.52	58,030.58	66.19	114,574.89	1.6	56,544.31	0.00	0.00
SIMPLY GOOD FOODS CO	3,577	20.59	73,648.14	39.77	142,257.29	2.0	68,609.15	0.00	0.00
UTZ BRANDS INC	1,982	16.38	32,463.41	16.47	32,643.54	0.5	180.13	1.38	451.90
ZEVIA PBC	4,535	8.49	38,491.47	3.85	17,459.75	0.3	-21,031.72	0.00	0.00
ENERGY			**448,458.94**		**420,117.90**	**6.0**	**-28,341.0**	**1.47**	**6,157**
AMERESCO INC	1,020	55.85	56,970.95	49.22	50,204.40	0.7	-6,766.55	0.00	0.00
CHAMPIONX CORP	2,290	30.14	69,010.49	27.13	62,127.70	0.9	-6,882.79	1.25	778.60
DENBURY INC	332	87.18	28,944.38	87.63	29,093.16	0.4	148.78	0.00	0.00
MATADOR RESOURCES CO	1,277	46.06	58,814.99	47.65	60,849.05	0.9	2,034.06	1.26	766.20
NORTHERN OIL AND GAS	2,750	29.14	80,123.46	30.35	83,462.50	1.2	3,339.04	4.48	3,740.00
TETRA TECHNOLOGIES	10,528	3.94	41,513.80	2.65	27,899.20	0.4	-13,614.60	0.00	0.00
VALARIS LTD	380	72.88	27,692.64	65.06	24,722.80	0.4	-2,969.84	0.00	0.00
CACTUS INC	1,983	43.06	85,388.23	41.23	81,759.09	1.2	-3,629.14	1.07	872.52
FINANCIALS			**415,163.95**		**428,513.56**	**6.1**	**13,349.6**	**3.13**	**13,415**
AXOS FINANCIAL INC	224	50.81	11,381.84	36.92	8,270.08	0.1	-3,111.76	0.00	0.00

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PORTFOLIO HOLDINGS

AS OF
MARCH 31, 2023

		Cost Basis		Market Value					Estimated
	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
BRP GROUP INC	3,148	14.84	46,720.26	25.46	80,148.08	1.1	33,427.82	0.00	0.00
HOULIHAN LOKEY	630	63.88	40,245.83	87.49	55,118.70	0.8	14,872.87	2.42	1,335.60
MOELIS & CO	2,170	41.50	90,060.53	38.44	83,414.80	1.2	-6,645.73	6.24	5,208.00
PALOMAR HOLDINGS INC	1,442	57.02	82,223.71	55.20	79,598.40	1.1	-2,625.31	0.00	0.00
PACIFIC PREMIER BANCORP	2,870	33.74	96,838.62	24.02	68,937.40	1.0	-27,901.22	5.50	3,788.40
SKYWARD SPECIALTY INSURANCE	1,470	16.48	24,227.76	21.87	32,148.90	0.5	7,921.14	0.00	0.00
TRINITY CAPITAL INC	1,640	14.31	23,465.40	12.73	20,877.20	0.3	-2,588.20	14.77	3,083.20
HEALTH CARE			**2,042,830.18**		**2,153,937.27**	**30.9**	**111,107.1**	**0.00**	**0**
ACADIA PHARMACEUTICALS INC	4,992	18.84	94,062.65	18.82	93,949.44	1.3	-113.21	0.00	0.00
ADAPTHEALTH CORP	3,771	20.12	75,866.80	12.43	46,873.53	0.7	-28,993.27	0.00	0.00
ALKERMES PLC	2,388	27.26	65,086.40	28.19	67,317.72	1.0	2,231.32	0.00	0.00
AMYLYX PHARMACEUTICALS INC	3,291	31.00	102,028.93	29.34	96,557.94	1.4	-5,470.99	0.00	0.00
ANI PHARMACEUTICALS INC	1,299	31.59	41,032.69	39.72	51,596.28	0.7	10,563.59	0.00	0.00
ARVINAS INC	557	59.60	33,195.43	27.32	15,217.24	0.2	-17,978.19	0.00	0.00
ATRICURE INC	1,725	32.73	56,460.81	41.45	71,501.25	1.0	15,040.44	0.00	0.00
BLUEPRINT MEDICINES CORP	1,503	62.60	94,084.52	44.99	67,619.97	1.0	-26,464.55	0.00	0.00
CERTARA INC	1,796	12.96	23,280.60	24.11	43,301.56	0.6	20,020.96	0.00	0.00
COLLEGIUM PHARMACEUTICAL INC	2,819	17.04	48,043.07	23.99	67,627.81	1.0	19,584.74	0.00	0.00
CUTERA INC	1,136	45.62	51,826.99	23.62	26,832.32	0.4	-24,994.67	0.00	0.00
CVRx INC	1,481	17.98	26,626.71	9.32	13,802.92	0.2	-12,823.79	0.00	0.00
CYTOKENETICS INC	801	44.85	35,927.98	35.19	28,187.19	0.4	-7,740.79	0.00	0.00

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PORTFOLIO HOLDINGS

AS OF
MARCH 31, 2023

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	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
DOCGO INC	5,644	8.42	47,532.00	8.65	48,820.60	0.7	1,288.60	0.00	0.00
HAEMONETICS CORPORATION	596	57.20	34,090.55	82.75	49,319.00	0.7	15,228.45	0.00	0.00
ICU MEDICAL INC	232	175.16	40,636.39	164.96	38,270.72	0.5	-2,365.67	0.00	0.00
INSMED INC	3,168	19.14	60,629.08	17.05	54,014.40	0.8	-6,614.68	0.00	0.00
IVERIC BIO INC	2,563	14.11	36,159.02	24.33	62,357.79	0.9	26,198.77	0.00	0.00
KARUNA THERAPEUTICS INC	264	166.55	43,968.74	181.64	47,952.96	0.7	3,984.22	0.00	0.00
LIVANOVA PLC	925	44.02	40,714.74	43.58	40,311.50	0.6	-403.24	0.00	0.00
LANTHEUS HOLDINGS INC	1,708	63.24	108,018.47	82.56	141,012.48	2.0	32,994.01	0.00	0.00
MADRIGAL PHARMACEUTICALS INC	278	283.20	78,728.80	242.26	67,348.28	1.0	-11,380.52	0.00	0.00
MERIT MED SYS INC	1,277	62.14	79,357.71	73.95	94,434.15	1.4	15,076.44	0.00	0.00
MANNKIND CORP	12,419	4.63	57,525.94	4.10	50,917.90	0.7	-6,608.04	0.00	0.00
NEOGENOMICS INC	5,728	12.80	73,343.16	17.41	99,724.48	1.4	26,381.32	0.00	0.00
ORTHOFIX MEDICAL INC	1,700	31.28	53,170.31	16.75	28,475.00	0.4	-24,695.31	0.00	0.00
PRIVIA HEALTH GROUP INC	2,811	30.66	86,184.49	27.61	77,611.71	1.1	-8,572.78	0.00	0.00
ULTRAGENYX PHARMACEUTICAL INC	1,606	65.43	105,076.40	40.10	64,400.60	0.9	-40,675.80	0.00	0.00
REPLIMUNE GROUP INC	3,301	24.21	79,919.38	17.66	58,295.66	0.8	-21,623.72	0.00	0.00
REATA PHARMACEUTICALS INC	1,061	27.91	29,612.19	90.92	96,466.12	1.4	66,853.93	0.00	0.00
PROMETHEUS BIOSCIENCES INC	441	109.43	48,259.11	107.32	47,328.12	0.7	-930.99	0.00	0.00
SEASPINE HOLDINGS CORP	0	#DIV/0!	0.00	9.54	0.00	0.0	0.00	#DIV/0!	0.00
THORNE HEALTHTECH INC	3,303	7.61	25,123.85	4.62	15,259.86	0.2	-9,863.99	0.00	0.00
TREACE MEDICAL CONCEPTS INC	4,688	19.44	91,111.70	25.19	118,090.72	1.7	26,979.02	0.00	0.00

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PORTFOLIO HOLDINGS

AS OF
MARCH 31, 2023

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	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
TRANSMEDICS GROUP INC	1,477	34.43	50,851.15	75.73	111,853.21	1.6	61,002.06	0.00	0.00
UNITED THERAPEUTICS CORP DEL	229	110.45	25,293.42	223.96	51,286.84	0.7	25,993.42	0.00	0.00
INDUSTRIALS			**824,374.54**		**970,306.93**	**13.9**	**145,932.4**	**0.29**	**2,813**
AEROVIRONMENT INC	657	88.38	58,063.64	91.66	60,220.62	0.9	2,156.98	0.00	0.00
BABCOCK & WILCOX ENTERPRISES	7,202	7.11	51,217.95	6.06	43,644.12	0.6	-7,573.83	0.00	0.00
EXPONENT INC	968	92.13	89,185.44	99.69	96,499.92	1.4	7,314.48	1.04	1,006.72
FIRST ADVANTAGE CORP	2,454	18.37	45,086.92	13.96	34,257.84	0.5	-10,829.08	0.00	0.00
SHIFT4 PAYMENTS INC	1,860	48.93	91,012.31	75.80	140,988.00	2.0	49,975.69	0.00	0.00
FORWARD AIR CORP COM	703	84.55	59,441.84	107.76	75,755.28	1.1	16,313.44	0.89	674.88
CHART INDS INC	642	59.86	38,428.75	125.40	80,506.80	1.2	42,078.05	0.00	0.00
HERC HOLDINGS INC	447	173.11	77,378.22	113.90	50,913.30	0.7	-26,464.92	2.22	1,130.91
KRATOS DEFENSE AND SECURITY	6,184	15.03	92,975.50	13.48	83,360.32	1.2	-9,615.18	0.00	0.00
MONTROSE ENVIRONMENTAL GROUP	1,591	24.79	39,442.90	35.67	56,750.97	0.8	17,308.07	0.00	0.00
MERCURY SYSTEMS INC	1,121	47.84	53,629.55	51.12	57,305.52	0.8	3,675.97	0.00	0.00
NAPCO SECURITY	550	31.50	17,325.00	37.58	20,669.00	0.3	3,344.00	0.00	0.00
NV5 GLOBAL INC	890	51.13	45,507.33	103.97	92,533.30	1.3	47,025.97	0.00	0.00
TRINET GROUP IN	954	68.85	65,679.19	80.61	76,901.94	1.1	11,222.75	0.00	0.00
REAL ESTATE			**103,621.09**		**98,182.58**	**1.4**	**-5,438.5**	**3.43**	**3,370**
HANNON ARMSTRONG INFRASTRUCTURE CAPITAL	696	46.37	32,271.81	28.60	19,905.60	0.3	-12,366.21	5.52	1,099.68
RYMAN HOSPITALITY PROPERTIES	426	79.11	33,702.23	89.73	38,224.98	0.5	4,522.75	3.34	1,278.00
TERRENO REALTY CORP	620	60.72	37,647.05	64.60	40,052.00	0.6	2,404.95	2.48	992.00

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PORTFOLIO HOLDINGS

AS OF
MARCH 31, 2023

		Cost Basis		Market Value					Estimated
	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
TECHNOLOGY			**800,440.45**		**1,028,441.21**	**14.7**	**228,000.8**	**0.00**	**0**
AMBARELLA INC	403	103.90	41,871.97	77.42	31,200.26	0.4	-10,671.71	0.00	0.00
COHERENT CORP	1,208	53.26	64,341.45	38.08	46,000.64	0.7	-18,340.81	0.00	0.00
CREDO TECHNOLOGY GROUP HOLDINGS	1,980	11.53	22,820.94	9.42	18,651.60	0.3	-4,169.34	0.00	0.00
EVERQUOTE INC	1,090	13.34	14,536.26	13.90	15,151.00	0.2	614.74	0.00	0.00
FABRINET	383	121.08	46,374.21	118.76	45,485.08	0.7	-889.13	0.00	0.00
INDIE SEMICONDUCTOR INC	3,497	10.18	35,583.96	10.55	36,893.35	0.5	1,309.39	0.00	0.00
IPG PHOTONICS CORP	283	98.69	27,929.11	123.31	34,896.73	0.5	6,967.62	0.00	0.00
JAMF HOLDING CORP	893	32.13	28,688.05	19.42	17,342.06	0.2	-11,345.99	0.00	0.00
MODEL N INC	2,580	16.31	42,067.97	33.47	86,352.60	1.2	44,284.63	0.00	0.00
MACOM TECHNOLOGY SOLUTIONS	1,323	24.06	31,827.02	70.84	93,721.32	1.3	61,894.30	0.00	0.00
PDF SOLUTIONS INC	1,716	25.18	43,204.71	42.40	72,758.40	1.0	29,553.69	0.00	0.00
PERFICIENT INC	764	51.33	39,218.94	72.19	55,153.16	0.8	15,934.22	0.00	0.00
RAMBUS INC	178	50.48	8,985.12	51.26	9,124.28	0.1	139.16	0.00	0.00
RAPID7 INC	1,180	35.91	42,371.02	45.91	54,173.80	0.8	11,802.78	0.00	0.00
SKYWATER TECHNOLOGY INC	2,672	19.35	51,706.07	11.38	30,407.36	0.4	-21,298.71	0.00	0.00
SUPER MICRO COMPUTER INC	1,350	41.19	55,607.60	106.55	143,842.50	2.1	88,234.90	0.00	0.00
TENABLE HOLDING	2,164	46.36	100,330.96	47.51	102,811.64	1.5	2,480.68	0.00	0.00
VARONIS SYSTEMS INC	3,182	16.19	51,513.69	26.01	82,763.82	1.2	31,250.13	0.00	0.00
CLEAR SECURE INC	561	29.65	16,633.49	26.17	14,681.37	0.2	-1,952.12	0.00	0.00
ZUORA INC	3,748	9.29	34,827.91	9.88	37,030.24	0.5	2,202.33	0.00	0.00

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PORTFOLIO HOLDINGS

AS OF
MARCH 31, 2023

		Cost Basis		Market Value					Estimated
	Quantity	Average Cost	Total Cost	Current Price	Total Value	% Portfolio	Unrealized Gain/Loss	Current Yield	Annual Income
TELECOMMUNICATIONS			**48,738.73**		**63,267.96**	**0.9**	**14,529.2**	**5.16**	**3,267**
COGENT COMMUNICATIONS HOLDINGS	883	47.44	41,892.83	63.72	56,264.76	0.8	14,371.93	5.81	3,267.10
HARMONIC INC	480	14.26	6,845.90	14.59	7,003.20	0.1	157.30	0.00	0.00
UTILITIES			**103,926.70**		**76,187.02**	**1.1**	**-27,739.7**	**1.89**	**1,440**
ARIS WATER SOLUTION INC	3,374	14.17	47,820.52	7.79	26,283.46	0.4	-21,537.06	4.62	1,214.64
EXCELERATE ENERGY INC	2,254	24.89	56,106.18	22.14	49,903.56	0.7	-6,202.62	0.45	225.40
TOTAL Equity			**6,067,819.56**		**6,714,136.42**	**96.2**	**646,316.9**	**0.52**	**35,034**
TOTAL Dividend Accruals					**2,548.22**	**0.0**			
TOTAL MANAGED			**6,330,504.95**		**6,979,370.03**	**100**	**646,316.9**	**0.5**	**35,034**

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DISCLOSURE

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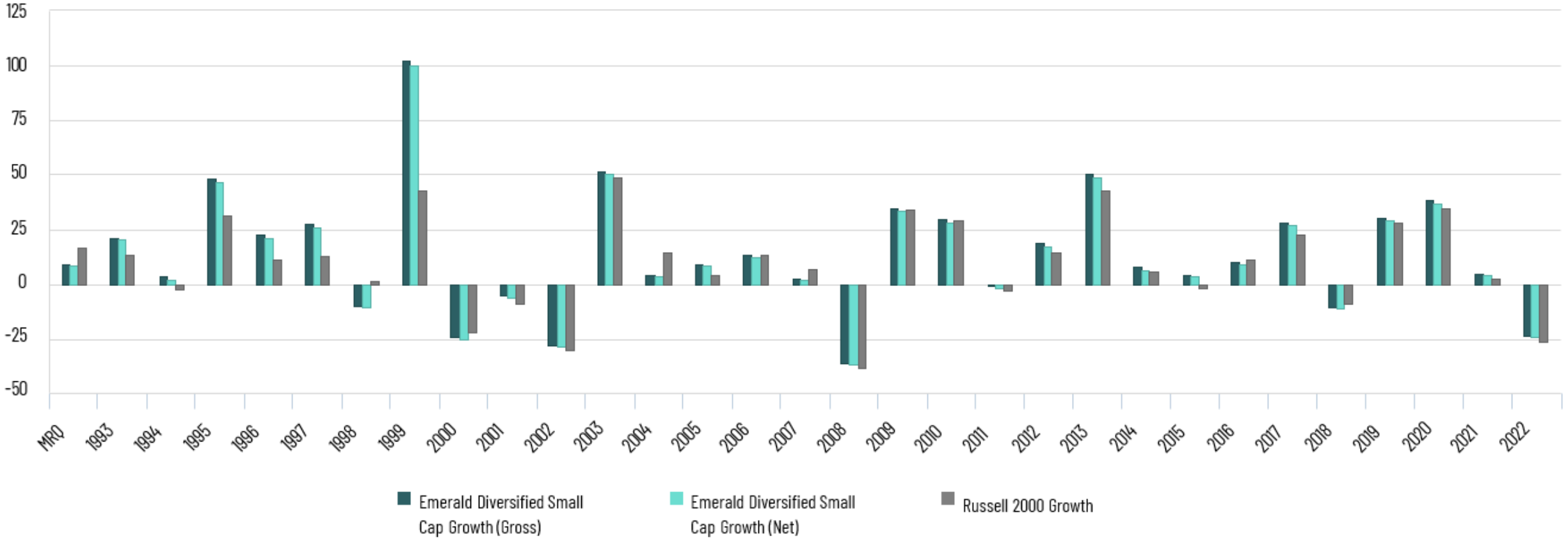
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CALENDAR YEAR PERFORMANCE

EMERALD DIVERSIFIED SCG SEPARATE ACCOUNT COMPOSITE

AS OF
DECEMBER 31, 2022

Emerald has outperformed in 24 of the 30 (gross of fees) and 21 of the 30 (net of fees) full calendar years we have been in business.



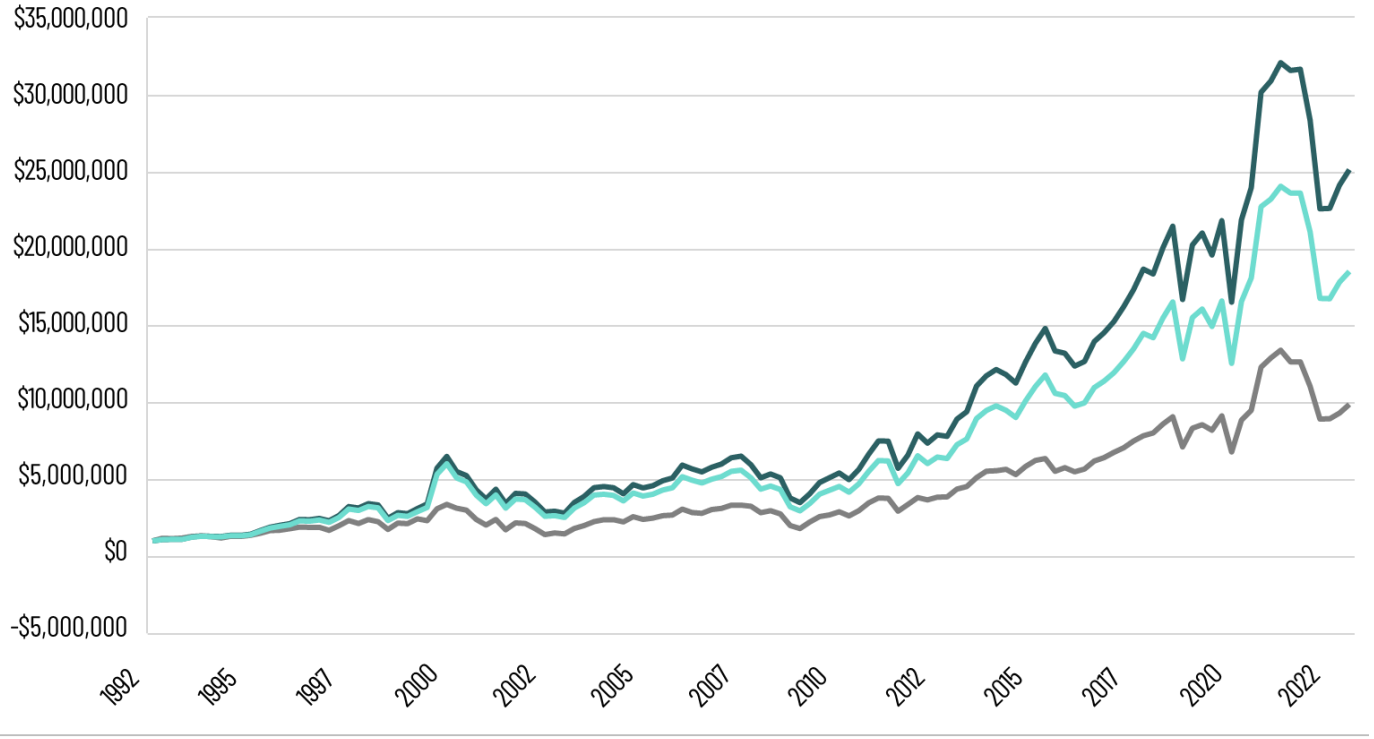
Performance Disclaimer - This includes all reinvestment of dividends. The fee used when computing net returns is 1%. Source: eVestment, Inception: 10/1/92

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GROWTH OF $1,000,000 SINCE INCEPTION

EMERALD DIVERSIFIED SCG SEPARATE ACCOUNT COMPOSITE

AS OF
MARCH 31, 2023



	2023
— Emerald Diversified Small Cap Growth (Gross)	$25,152,878.72
— Emerald Diversified Small Cap Growth (Net)	$18,526,528.28
— Russell 2000 Growth	$9,868,989.35

(Based on Quarterly Returns)

Performance Disclaimer - This includes all reinvestment of dividends. The fee used when computing net returns is 1%. Source: eVestment, Inception: 10/1/92

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EMERALD DIFFERENTIATORS



IN-HOUSE RESEARCH ORIENTATION



10-STEP REPEATABLE PROCESS



SKILL SET OF RESEARCH ANALYSTS



TEAM APPROACH TO RAPIDLY CHANGING SECTORS

- HEALTHCARE TEAM
- TECHNOLOGY TEAM



22 YEARS AVERAGE INDUSTRY EXPERIENCE*



LONGEVITY OF RESEARCH TEAM



ALWAYS TRUE TO GROWTH AND CAP SIZE MANDATES

As of December 31, 2022

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EMERALD DIFFERENTIATORS

- Ability to invest, analyze, evaluate and properly value pre-profit opportunities
- Ability to participate in various opportunities by using a portfolio of up to 120 stocks
- Examines the entire Russell 2000 universe for idea generation
- 30 years of working to generate alpha using the same Process, Philosophy & Portfolio Management*
- Unequal weighted manager, base weightings on each company's fundamental outlook, company specific risk and risk structure of the existing portfolio
- Unique portfolio construction risk constraints



As of December 31, 2022

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EMERALD KEYS TO SUCCESS

STABILITY OF EMERALD

30 years as a growing boutique investment manager*

All employees participate in ownership via ESOP plan

Low turnover of investment professionals

Retention promoted via equity awards

15 years average client tenure*

EXPERIENCE

33 years average industry experience for the Small Cap Growth strategy portfolio management team*

Experienced client services team dedicated to providing client support

COLLABORATIVE RESOURCES

Collection of firm investment staff knowledge provides a blend of independent thinking

ADHERENCE TO PHILOSOPHY/ PROCESS

Emerald has former plan sponsor CIOs on staff that have a deep understanding of plan sponsor needs

Managers remain true to style

Managers are invested in the product managed

Committed to company-wide culture of compliance

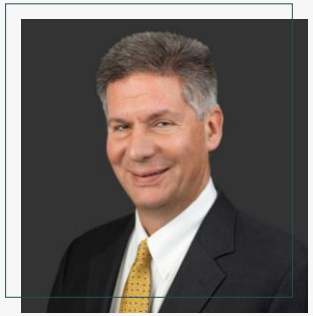
PERFORMANCE

Consistent portfolio characteristics

**As of December 31, 2022. Includes institutional client tenure of Emerald Advisers, LLC and Emerald Mutual Fund Advisers Trust.*

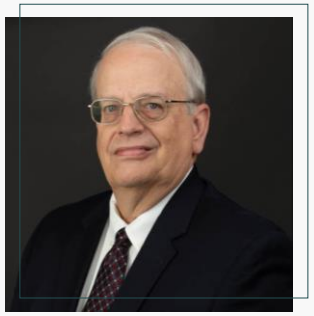
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BIOGRAPHIES



JOSEPH W. GARNER

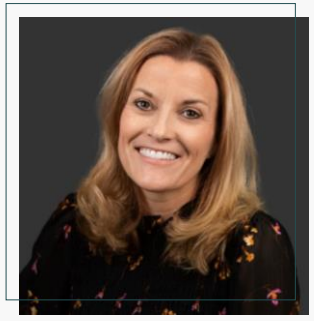
Mr. Garner is Director of Research and a member of the Small Cap Portfolio Management team. Mr. Garner's research efforts are focused on small and mid-sized firms in the Business Services, Capital Goods, Consumer, Financial Services, and Technology sectors. He has appeared on Bloomberg Television and CNBC. He also has been quoted in Fortune, Bloomberg Business News, USA Today, Dow Jones News Service, Standard & Poor's, MarketWatch, Investor's Business Daily, Wall Street Journal, and other media. Mr. Garner serves as a Director for the Millersville University Foundation and Chairman of the Investment Committee and previously served as the President of the Board of Directors for the Foundation. Prior to joining Emerald in 1994, Mr. Garner was the Program Manager of the PA Economic Development Financing Authority (PEDFA) and an Economic Development Analyst with the PA Department of Commerce's Office of Technology Development. Mr. Garner received an MBA from the Katz Graduate School of Business, University of Pittsburgh, and graduated magna cum laude with a BA in Economics from Millersville University.



KENNETH G. MERTZ II, CFA

Mr. Mertz is Chief Investment Officer and President of Emerald Advisers, LLC and a member of the Small Cap Portfolio Management team. He is also a Co-Manager of the Emerald Finance & Banking Innovation Fund. Portfolio Manager, Emerald Financial Services Private Equity Fund I, LP.; past Trustee and Vice President of the Emerald Mutual Funds; Chief Investment Officer, PA State Employees' Retirement System (1985-1992); Member, CFA Institute; past Member, Pennsylvania State University Research Foundation; past Trustee, Evangelical Lutheran Church in America Board of Pensions; past Trustee, Pennsylvania State University Endowment Council (1998-2004); and past Chair, President, & Director of Central Pennsylvania Investment Managers. He is currently a board member and was the former Chairman of Diakon Children, Family and Community Ministries, and the former Chairman of the Diakon Lutheran Fund, its endowment arm. Mr. Mertz has been quoted in The Wall Street Journal and in USA Today, and has served as speaker at various investment seminars and programs across the country. He has been a guest on CNBC's Mutual Fund Investor, and has been interviewed several times on CNBC and Bloomberg TV. Mr. Mertz graduated from Millersville University with a BA in Economics. Mr. Mertz is a CFA charterholder.

Kenneth G. Mertz has earned the right to use the Chartered Financial Analyst designation. CFA Institute marks are trademarks owned by the CFA Institute.



STACEY L. SEARS

Ms. Sears is Senior Vice President and a senior member of the Small Cap Portfolio Management team, working directly with the research team, interacting with team members across economic sectors and helping guide the day-to-day portfolio management decision-making process. Ms. Sears is also responsible for portfolio risk monitoring, portfolio attribution analysis, as well as Emerald's portfolio management-related client communications. From a research perspective, Ms. Sears maintains research coverage of the Retail, Apparel, Restaurant, Consumer Goods and Consumer Technology companies. She has been quoted in Fortune, Money, the Dow Jones News Service and various regional newspapers. Ms. Sears received a BS in Business Administration from Millersville University and an MBA from Villanova University.

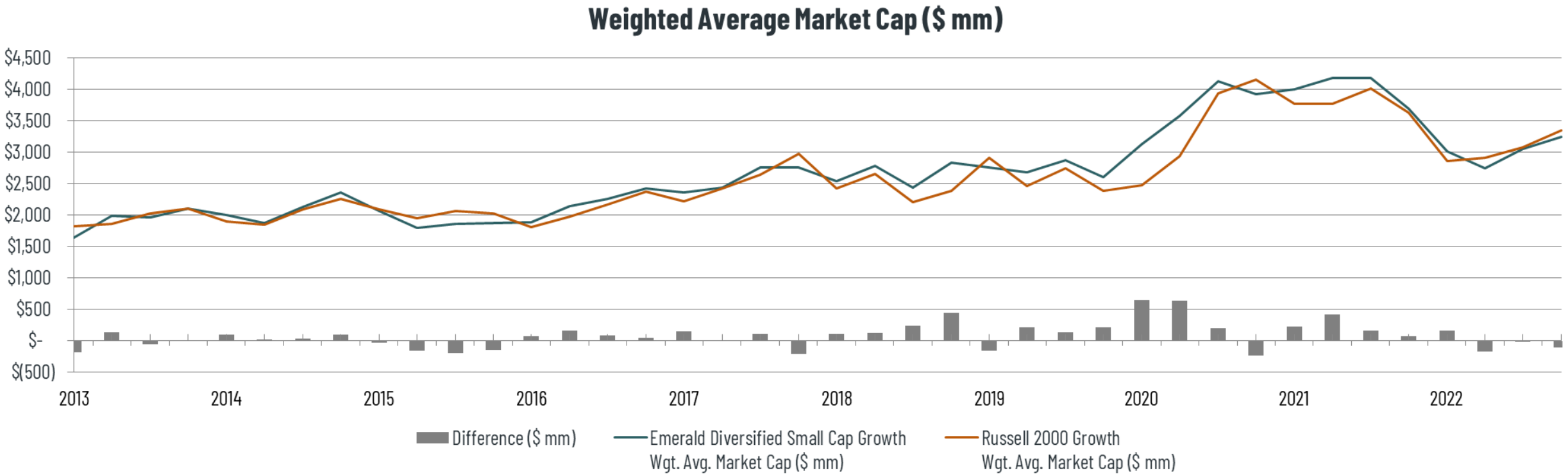
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SUPPLEMENTAL **MATERIAL**

10-YEAR WEIGHTED AVERAGE MARKET CAP

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023



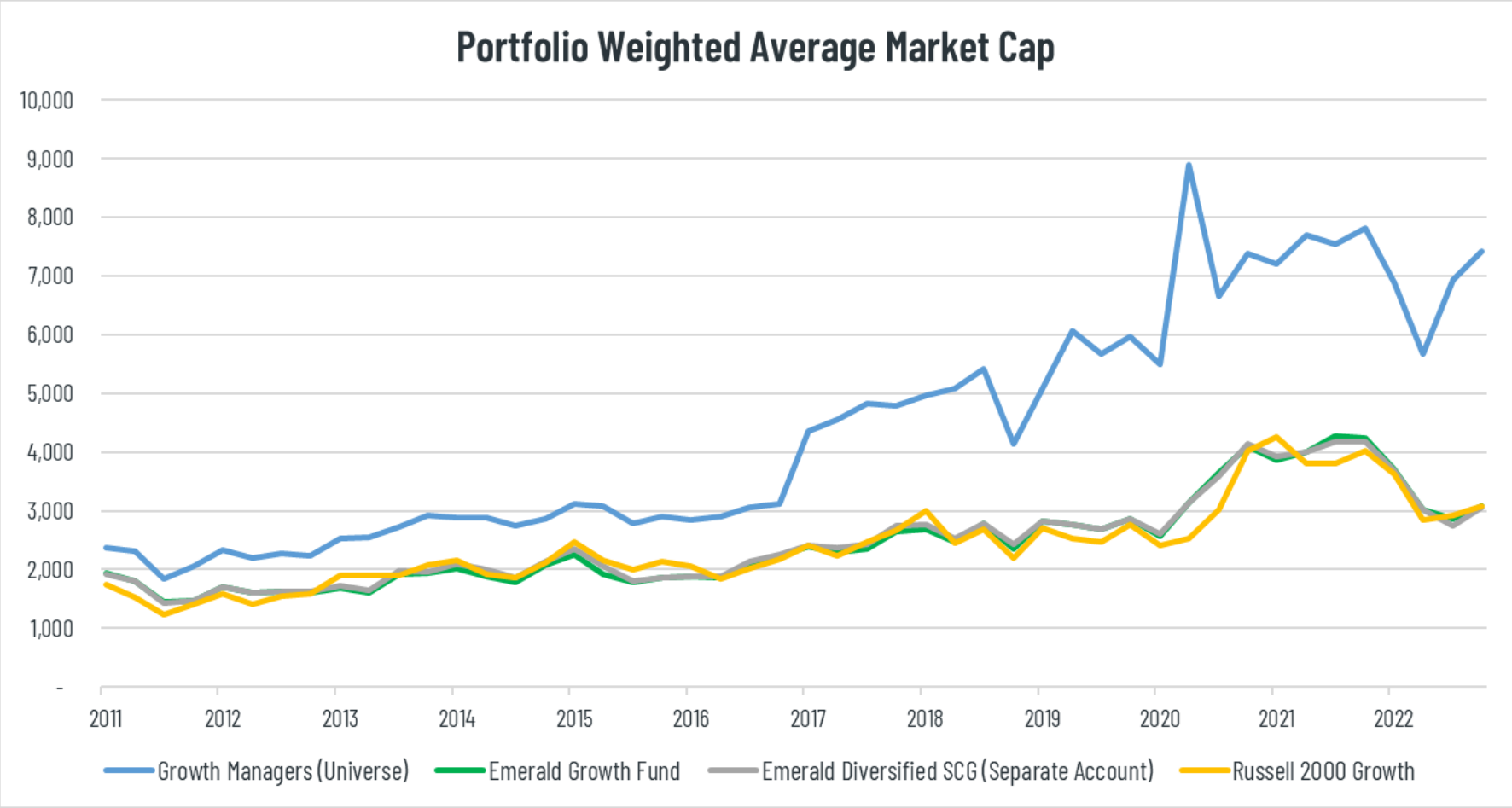
Source: FactSet. This information reflects Emerald's Diversified Small Cap Growth Separate Account Institutional Strategy Account and does not include the deduction of management and other fees. Institutional accounts may differ in performance and composition from the mutual fund. Portfolio characteristics are subject to change periodically and may not be representative of current characteristics. Diversification does not assure a profit or protect against loss.

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WEIGHTED AVERAGE MARKET CAP

MARCH 31, 2011 – DECEMBER 31, 2022

AS OF
DECEMBER 31, 2022



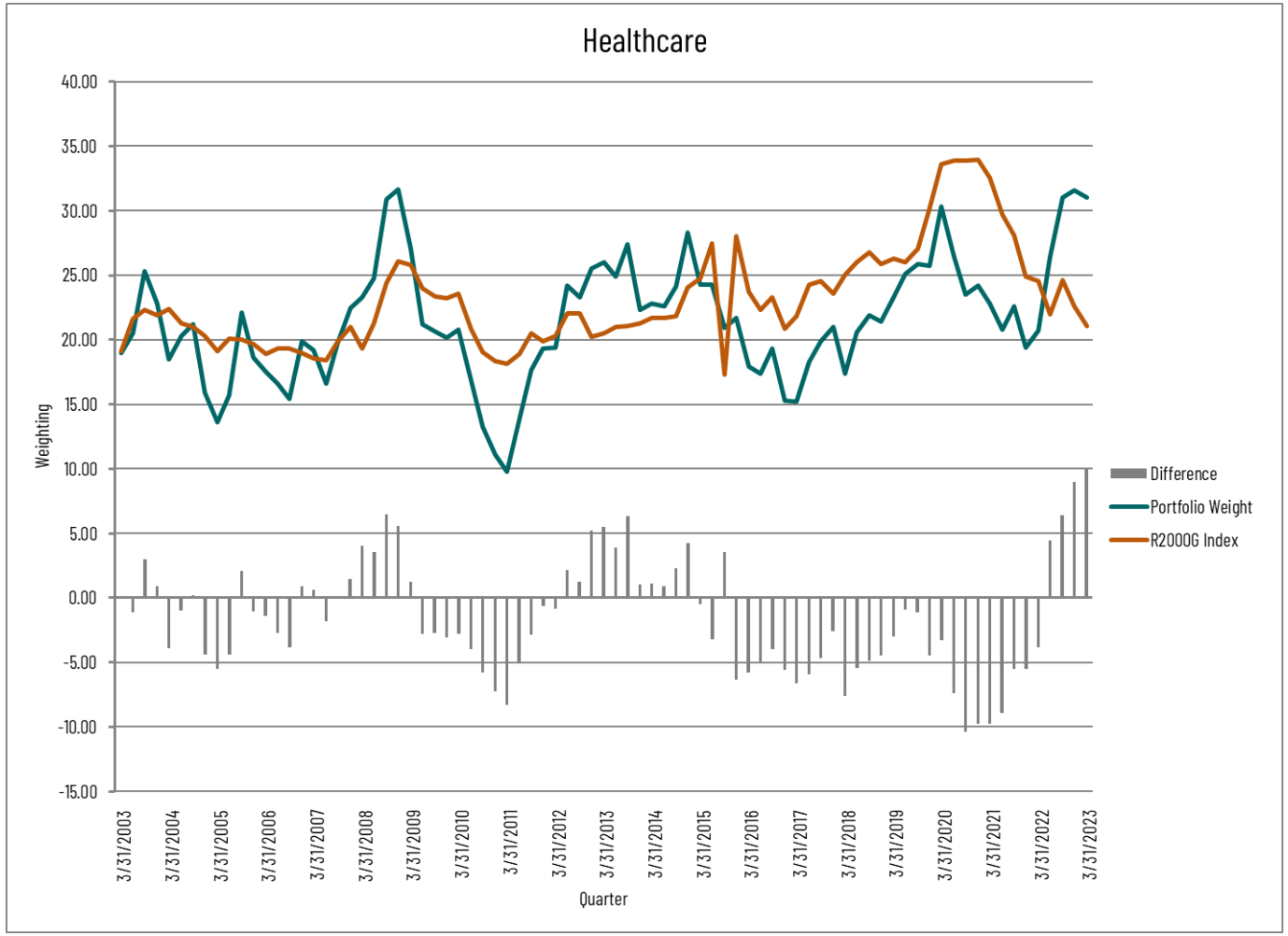
Note: Pending quarter-end March 31, 2023 update, the data presented on this page is as of December 31, 2022. Source: FactSet; FTSE Russell; Lipper; Jefferies. Small Cap Growth Mutual Fund Managers Universe as defined by Lipper, supplied by Steve DeSanctis, Jefferies. Portfolio characteristics are subject to change periodically and may not be representative of current characteristics. Diversification does not assure a profit or protect against loss.

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HEALTHCARE WEIGHTING

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023



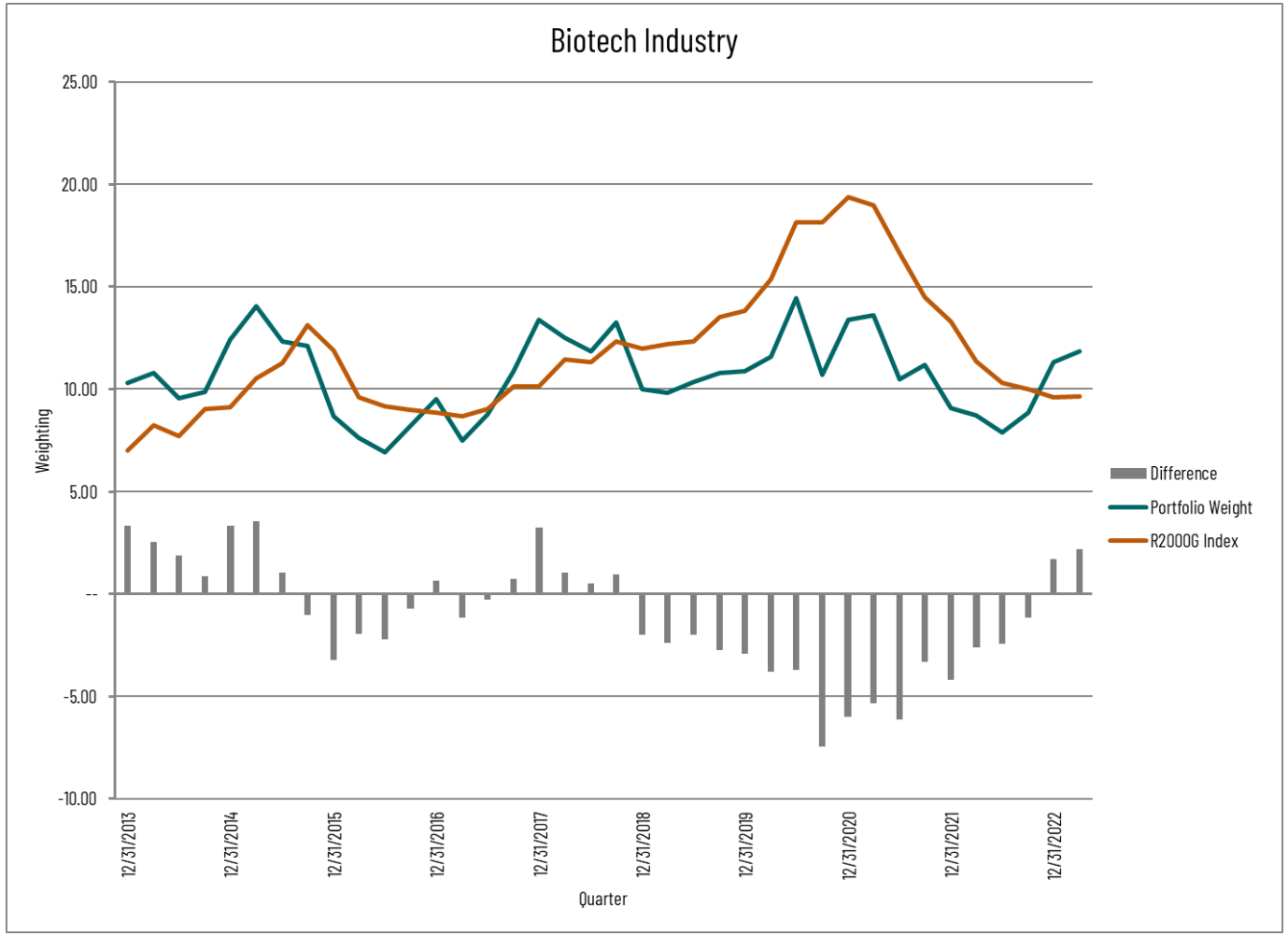
Source: INDATA/FTSE Russell. This information reflects Emerald's Diversified Small Cap Growth Separate Account Institutional Strategy Account and does not include the deduction of management and other fees. Institutional accounts may differ in performance and composition from the mutual fund. Portfolio characteristics are subject to change periodically and may not be representative of current characteristics. Diversification does not assure a profit or protect against loss.

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BIOTECH WEIGHTING

EMERALD DIVERSIFIED SMALL CAP GROWTH

AS OF
MARCH 31, 2023



Source: INDATA/FTSE Russell. This information reflects Emerald's Diversified Small Cap Growth Separate Account Institutional Strategy Account and does not include the deduction of management and other fees. Institutional accounts may differ in performance and composition from the mutual fund. Portfolio characteristics are subject to change periodically and may not be representative of current characteristics. Diversification does not assure a profit or protect against loss.

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Stacey L. Sears, MBA

DISCLOSURES & DEFINITIONS

Definitions*

Alpha: Alpha measures a mutual fund manager's or strategy's effectiveness. It shows the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta.

Basis Point: A basis point is one-one hundredth of a percentage point. In other words, 0.01% is 1 basis point. One hundred basis points is 1%.

Batting Average: Batting average is a measure of a manager's ability to consistently beat the market. It is calculated by dividing the number of months in which the manager beat or matched the fund's primary benchmark index by the total number of months in the period. For example, a manager who meets or outperforms the market every month in a given period would have a batting average of 100. A manager who beats the market half of the time would have a batting average of 50.

Beta: A fund's beta is a measure of its sensitivity to market movements.

EPS (Earnings Per Share) Growth Rate (Projected): The estimated 3-5 year earnings growth rate is calculated utilizing a pre-calculated mean long-term EPS growth rate estimate for portfolio holdings, as available, provided by FactSet and sourced from brokerage estimate submissions to estimate services (FactSet, IBES, First Call, etc.). The estimated 3-5 year earnings growth rate for the portfolio is then calculated utilizing the weighted average of the individual portfolio holding estimated 3-5 year earnings growth rates. The data reported is as of the report date. Estimated 3-5 year EPS growth rates may not correspond to future returns achieved by the portfolio or any particular security in it and are merely presented to show that the manager's bias is towards those positions that are projected to have a superior EPS growth rate to those of the index as a whole.

P/E Ratio: The P/E Ratio or Price/Earnings Ratio is a valuation metric that assesses how many dollars investors are willing to pay for one dollar of a company's earnings. It's calculated by dividing a stock's price by the company's trailing 12-month earnings per share from continuous operations.

Price/Book Ratio: The price/book (P/B) ratio of a fund is the weighted average of the price/book ratios of all the stocks in a fund's portfolio. Book value is the total assets of a company, less total liabilities (sometimes referred to as carrying value). A company's book value is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding (stocks with negative book values are excluded from this calculation).

Russell Mid Cap Index: An index maintained and updated by FTSE Russell, the Russell Mid Cap Index is comprised of 800 publicly traded U.S. companies with market caps of between $2 and $10 billion.

Russell 2000 Growth Index: Measures the performance of those Russell 2000 Index companies with higher price-to-book ratios and higher forecasted growth value.

Russell 2000 Index: The most commonly used benchmark for measuring the performance of small-cap stocks. Updated annually by FTSE Russell, the Russell 2000 consists of the 1,001st through 3,000th largest companies in the U.S. in terms of market cap.

R-squared: R-squared measures the relationship between a portfolio and its benchmark index. It is expressed as a percentage from 1 to 100. R-squared is not a measure of the performance of a portfolio. Rather, it measures the correlation of the portfolio's returns to the benchmark's returns.

S&P 500 Index: The Standard & Poor's index of 500 stocks is a popular standard for measuring stock market performance among the biggest, most broadly-based companies in the U.S.

Upside/Downside Market Capture: Upside/downside capture ratio show you whether a given fund has outperformed--gained more or lost less than--a broad market benchmark during periods of market strength and weakness, and if so, by how much.

**Sources include Morningstar and FTSE Russell*

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EMERALD
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SINCE 1992

EMERALD DIVERSIFIED SMALL CAP GROWTH

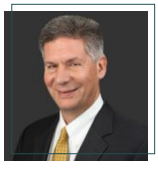
SMALL CAPS HURT BY BANKING CRISIS

2023 GOT OFF TO A BLISTERING START with the broad market indices including the Russell 2000 (+9.75%) and Russell 1000 (+6.70%) posting strong gains in January catalyzed by growing optimism of no landing/soft landing in the domestic economy. In February this enthusiasm transitioned to overheating fears with the market anticipating a return of 50 basis point hikes at the March meeting and a terminal Federal Funds rate of 5.70% (as of 3/8/23). The twin failures of Silicon Valley Bank and Signature Bank and the forced sale of Credit Suisse to UBS in March shifted the narrative yet again, sending shockwaves through the financial markets and igniting fears of a 2007-2008 Great Financial Crisis redux.

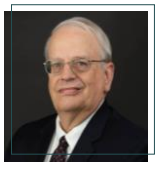
Although the panic has since faded as bank deposits have stabilized and wholesale borrowing has slowed, the prospect of a further tightening in lending standards, and more constrained credit availability in the wake of the Federal Reserve's near historic trajectory of interest rate increases and unwavering resolve to blunt inflation, have collectively driven renewed fears of a hard landing in the U.S. economy. Treasury volatility has been historic In proportion

KEY POINTS:

- ***After a strong start to 2023 with the Russell 2000 (+7.89%) leading the Russell 1000 (+4.17%) by 373 basis points through the month of February, the Russell 2000 (-4.78%) declined significantly during the month of March.***
- ***The Emerald Diversified Small Cap Growth portfolio trailed the Russell 2000 Growth benchmark for the first quarter of 2023. The portfolio was challenged by both stock selection and allocation effect as relative outperformance within the healthcare sector was more than offset by relative underperformance within the technology, industrials, consumer discretionary, energy and utilities sectors.***
- ***As we enter the second quarter of 2023, the portfolio currently holds the largest active exposures in the healthcare, consumer discretionary, and consumer staples***



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with the two-year treasury yield moving from 4.28% in early January to a peak of 5.07% on March 8, only to fall to approximately 4.00% in early April, as market expectations for the path and pace of the Federal Funds rate rapidly reset.

With risk aversion running high, defense again became the best offense, with investors re-upping their early 2020 playbook and aggressively moving up the market capitalization spectrum and buying technology. Large capitalization stocks surged, with the S&P 500 and Russell 1000 gaining +3.67% and +3.16% respectively for the month of March, and +7.50% and +7.46% for the first quarter. Notably performance was very concentrated at the top of the market capitalization spectrum with the S&P 500 equal-weighted Index returning a much more modest (-0.88%) during March and +2.93% for the first quarter. This phenomenon was also evident within the Russell 1000, with the top quintile (largest) market capitalization stocks outperforming the Index overall by 100 basis points, while quintiles two through five collectively underperformed, according to an April 4, 2023, report from Steven DeSanctis, Equity Strategist at Jefferies.

This rapid transition in sentiment weighed heavily on small capitalization stocks. After a strong start to 2023 with the Russell 2000 (+7.89%) leading the Russell 1000 (+4.17%) by 373 basis points through the month of February, the Russell 2000 (-4.78%) declined significantly during the month of March. The magnitude of March's relative underperformance not only erased the Russell 2000 Index's early year lead, but also flipped the Russell 2000 from a year-to-date leader to a year-to-date laggard with a first quarter return of +2.74%, 472 basis points behind the Russell 1000 (+7.46%).

Underlying the relative strength in large capitalization stocks was a sizeable rotation into the technology sector driven by falling yields and rising recession fears. Within the Russell 1000, the technology sector, as defined by the Russell Industry Classification Benchmark according to FactSet, returned +25.25% for the quarter and contributed more than 600 basis points to the return of the Index. Although the technology sector did outperform within the Russell 2000 as well, the sector returned a significantly more modest +13.51% and contributed 137 bps to the Russell 2000's total return. To put the magnitude of this relative underperformance in context, and using the Nasdaq Composite as a proxy, the Russell 2000 (+2.74%) lagged the Nasdaq Composite (+16.77%) for the first quarter by approximately 1,400 basis points, the widest gap of underperformance since March 2020, according to the same report from Steven DeSanctis cited above.

From a style perspective, the outperformance of the technology sector and underperformance of financials drove a resurgence in growth as a style, with the Russell Growth indices outperforming their Value counterparts across the capitalization spectrum. Within the Russell 1000, the Russell 1000 Growth (+14.37%), significantly outpaced the Russell 1000 Value (+1.01%). Similarly, within the Russell 2000 Index, the Russell 2000 Growth (+6.07%) outpaced the Russell 2000 Value (-0.66%), although the gap of relative outperformance was substantially narrower at 673 bps for the same period.

Although growth as a style outperformed across the market capitalization spectrum, when comparing the composition of returns within the Russell 2000 Growth Index to those of the Russell 1000 Growth Index there were several noteworthy divergences. For example, according to an April 4, 2023 report from Steve DeSanctis of Jefferies, when comparing the performance of the fastest growing companies as measured by sales growth within the Russell 2000 Growth, the top quintile or fastest growers underperformed the Index overall by 541 basis points, while that same cohort within the Russell 1000 Growth outperformed by 1,120 basis points. There were also interesting differences when viewing performance by P/E quintile. While the highest P/E quintile companies outperformed within both indices, that cohort within the Russell 2000 Growth outperformed by 400 basis points, as compared to the same cohort within the Russell 1000 Growth, which outperformed by 995 basis points. Similarly, whereas the non-earnings cohort underperformed by 363 basis points within the Russell 2000 Growth Index, the non-earnings cohort within the Russell 1000 Growth Index outperformed by 287 basis points. Interestingly, despite the growing concerns over credit availability and rising recession risks, the more highly leveraged companies within the Russell 2000 Growth

performed inline to slightly better than the Index overall, while the more highly leveraged companies within the Russell 1000 Growth underperformed by 373 basis points relative to the Index overall.

Also noteworthy was the distribution of performance by market capitalization. Within the Russell 1000 Growth, we think it is interesting that like the Russell 1000 discussed above, the relative outperformance within the Index was concentrated in the largest market capitalization quintile, with this subset returning +15.53% and outperforming by 116 basis points. The remaining four quintiles underperformed the Russell 1000 Growth Index overall. Within the Russell 2000 Growth, the smallest market capitalization underperformed by 984 basis points, but unlike the Russell 1000 Growth the largest quintile also underperformed by 45 basis points. Only quintile two within the Russell 2000 Growth demonstrated relative outperformance, outpacing the benchmark overall by 235 basis points.

PORTFOLIO REVIEW

The Emerald Diversified Small Cap Growth portfolio trailed the Russell 2000 Growth benchmark for the first quarter of 2023. The portfolio was challenged by both stock selection and allocation effect as relative outperformance within the healthcare sector was more than offset by relative underperformance within the technology, industrials, consumer discretionary, energy and utilities sectors.

The technology sector was the portfolio's top detractor to return for the quarter, as both allocation effect and stock selection weighed on relative performance. After lagging throughout 2022, the technology sector surged +14.92% during the first quarter of 2023. Although Emerald's technology sector weighting increased during the first quarter, strength within the sector was broad-based and, as a result, performance headwinds were most acute in those industries where the portfolio was underweight, including semiconductors, production technology equipment and software. Notably, there were no technology companies within the top 10 detractors to portfolio performance. These headwinds more than offset the strong contribution from the shares of Super Micro Computer, which were a top 10 contributor to portfolio performance. The company posted another quarter of exceptionally strong results, driven by a secular shift towards workload-optimized server configurations, and this hyper-customization makes them much more than just a commodity contract manufacturer. Given the tailwinds to growth from the ongoing secular shift, a corporate margin profile that is 2x-3x higher than commodity server peers and attractive valuation, Emerald has maintained its position in the shares of Super Micro Computer Inc.

Performance within the industrials sector was also challenging, weighed down by a combination of stock selection and allocation effect resulting from the portfolio's sizeable underweight relative to the benchmark. At the industry level, relative outperformance within the transaction processing and defense industries was not enough to overcome the portfolio's underweight position and stock selection headwinds within the professional business support and services industry. At the stock level, the most notable detractor to return was NV5 Global Inc., a professional and technical consulting organization that provides solutions in areas such as transportation, energy, water, and wastewater management. Shares of the company came under pressure after reporting weaker than expected results for the fourth quarter of 2022 as project work within its interest rate-sensitive sectors, including real estate transactions and municipal services, fell short of expectations. Despite the softer-than-expected Q4-22 and lower earnings guidance for FY23, the company exited 2022 with a record backlog of $800 million, representing a 15% increase year-over-year and a 5% increase sequentially. Emerald has maintained its position in the shares of NV5 Global as the company's backlog continues to build and we believe increased focus on climate change, defense, and the need for efficient energy distribution and alternative energy production will continue to drive incremental demand for NV5's services.

Also detracting from performance was stock selection within the consumer discretionary sector. At the industry level, the positive contribution to return from holdings within the

casinos and gambling, restaurant, recreational services, and airlines industries was more than offset by the negative contribution to return from holdings within the specialty retail industry. The relative underperformance was driven by the significant decline in shares of National Vision Holdings, which were the portfolio's largest detractor to return to quarter. National Vision Holdings is one of the largest retailers of prescription eyeglasses and contact lenses in the U.S. Shares of the company came under meaningful selling pressure in reaction to 2023 earnings guidance that fell significantly short of consensus expectations. While comparable store sales growth guidance of flat to 3% encompassed consensus expectations, management's newly minted initiatives to improve recruiting and retention of optometrists, investments in remote medicine, digital medical records, and the reinstatement of incentive compensation resulted in a meaningful step-up in operating expenses and EPS guidance of $0.42 per share to $0.60 per share vs. consensus of $1.00 per share. While the magnitude of the increase in operating expenses was a surprise, we believe management's aggressive move to improve optometrist staffing levels and invest in productivity improving initiatives (remote medicine and digital medical records) will better position National Vision as sales trends and optical buying patterns normalize. Prior to COVID, National Vision had delivered more than 70 consecutive quarters of comparable store sales gains. While COVID and stimulus has created distortions in sales trends and a rethinking of the optometrists' employment and compensation structure over the last two years, we believe the recent retrenchment in the share price provides an attractive opportunity to invest in the largest independent public optical value retail company, with strong secular growth tailwinds and a meaningful opportunity for market share gains and profitability improvement. Emerald has maintained its position in the shares of National Vision.

Relative performance also proved challenging within the energy sector. The energy sector of the Russell 2000 Growth Index was the worst performing sector for the quarter, declining (6.82%) as WTI Oil and Henry Hub natural gas prices retrenched, reflecting a warmer than normal winter and ample domestic supply growth. From a portfolio perspective, Emerald's performance lagged that of the benchmark as the overweight and composition of the portfolio's energy service and equipment holdings were caught in the crosshairs of both a sector rotation out of energy, and concerns about oil and gas producers' capex spending plans. At the stock level, the most notable detractor to return was the shares of ProFrac Holding Corp., a fast growing, price leading pressure pumping company. Emerald had reduced exposure during the first quarter on concerns regarding pricing and utilization weakness within the company's natural gas centric customers. That fear was confirmed in ProFrac's mixed fourth quarter 2022 financial results and pessimistic near-term business outlook for 2023. Emerald exited the remaining position in the shares of ProFrac prior to quarter-end. Emerald has maintained its overweight position to the oilfield service industry as valuations have severely contracted, international spending is likely to surprise to the upside, and domestic activity should remain robust in part due to a supply constrained equipment and service environment.

Performance within the utilities sector also detracted from return, resulting largely from the relative underperformance of the shares of Aris Water Solutions. Aris provides water management and recycling services to energy exploration and production companies in the Permian basin. Shares of Aris came under pressure in response to disappointing fourth quarter financial results and 2023 guidance, as the mild winter weather noticeably impacted energy consumption causing energy producers to lower expectations for production in 1H23. The cost deleveraging associated with the declines in production are being magnified by the unusually high capital investments required to integrate Aris' August 2022 acquisition of Delaware Energy LLC. While these factors have created a near-term headwind to financial performance, inflationary pressures have subsided for many of its chemical inputs and Aris's contractual inflation offset will "kick-in" in 2Q23. ARIS's large customers (Chevron, Conoco Phillips, Exxon) target 15% - 25% y/y production growth in 2H23 and the company's offtake capacity will increase meaningfully when its pilot program for beneficial reuse is approved by the EPA. Emerald has maintained its position in the shares of Aris Water Solutions.

Partially offsetting the sources of weakness outlined above was the stock selection driven relative outperformance of the Healthcare sector. Despite the negative contribution to return from allocation effect as the healthcare total return of the Russell 2000 Growth Index lagged that of the Index overall, solid stock selection and relative outperformance within the medical equipment and medical services industries drove the sector's positive contribution to return. At the stock level, the portfolio's top contributors to return included: Reata Pharmaceuticals, NeoGenomics Inc. and Lantheus Holdings Inc. Shares of Reata Pharmaceuticals appreciated meaningfully during the quarter in response to the FDA's approval of Skylaris, the first drug approved for treatment of Friedrich's Ataxia (FA). FA is a debilitating and progressive neurological disorder that is typically diagnosed around age ten. The disease damages the cerebellum, spinal cord, and peripheral nerves. People with FA lose their ability to walk and control their limbs as the disease progresses. We expect a robust launch and continue to hold a position in Reata. Also contributing to performance were the shares of clinical lab company Neogenomics. Shares of the company appreciated following strong fourth quarter financial results and enthusiasm for Neogenomic's newly released RaDaR® assay, a liquid biopsy test for molecular/minimal residual disease (MRD). MRD is the trace amounts of circulating tumor DNA (ctDNA) that remain after surgery or other cancer treatment. At approximately $20 billion in market size by Emerald's estimation, the liquid biopsy market and the RaDaR assay will be an important growth driver for Neogenomics in 2024 and beyond. While Emerald did take the opportunity to tactically reduce exposure to shares of Neogenomics in response to the outsized outperformance of the shares during the first quarter, we remain optimistic on the long-term opportunity and continue to hold the shares. Lantheus Holdings, a provider of diagnostic imaging and nuclear medicine products, was also a top contributor to return for the quarter. The company reported significantly better than expected financial results for the fourth quarter with revenues surging 103% year over year. Growth was led by PYLARIFY, a diagnostic agent indicated for PET of prostate specific membrane antigen positive lesions in men with prostate cancer. With this new technology metastasis can be detected earlier than would have been possible with prior technologies. Emerald remains optimistic on the growth trajectory for PYLARIFY and anticipates recent revenue strength to continue throughout 2023 as this new diagnostic agent garners incremental market share. We have maintained our position in the shares of Lantheus Holdings.

As we enter the second quarter of 2023, the portfolio currently holds the largest active exposures in the healthcare, consumer discretionary, and consumer staples sectors. Thoughts on those sectors and other notable areas of exposure are highlighted below.

- The healthcare sector represents the portfolio's largest nominal and active exposure. At the industry level, the portfolio currently holds the largest nominal and relative overweight positions within the medical equipment, biotechnology, pharmaceuticals, and medical services industries. We continue to be focused on medical device and diagnostic companies that are profitable and not trading on a revenue multiple. For therapeutics, we are focused on the few companies that are profitable and those with quality assets generating revenue with a view towards profitability. Approximately 60% of our therapeutics (biotech + pharma) exposure is in companies that have revenue. The non-revenue generating companies we hold are quite mature relative to our historical holdings.

- Emerald also held an overweight position within the consumer discretionary sector at quarter-end. The overweight is comprised of a diverse subset of holdings within the specialty retail, recreational services, recreational products, restaurants, casinos and gambling, and auto parts industries among others. The consumer proved to more resilient than the market expected during 2022 and we believe, barring an overreach by the Federal Reserve that results in a significant increase in the unemployment rate, that the consumer will demonstrate a similar resiliency, as inflationary pressures abate, and real wages turn positive. At the same time we do believe

that the rate of change in consumer spending growth will likely decelerate as spending behavior and savings rates normalize and therefore remain focused on select opportunities in those companies offering differentiated products and services that we believe are well positioned to gain market share.

- The portfolio also exited the first quarter with an overweight position within the consumer staples sector. Emerald remains positive on the fundamental outlook for consumer-packaged goods companies entering 2023. There are several emerging signs that the broad-based cost inflation and supply chain issues that plagued the industry throughout 2022 are abating, which should result in higher profit margins as the year progresses. We continue to focus on companies with disruptive brands, category leadership positions, strong secular growth opportunities, and improving profit margins that should enable them to navigate an often-turbulent business environment and post industry leading revenue and earnings growth.

MARKET OUTLOOK

Recession fears return to the forefront. After a strong start to 2023, driven by stronger than expected economic data, domestic economic growth is again showing signs of deceleration. The Atlanta Fed GDP Now first quarter 2023 forecast has decelerated from the 3.2% expected at the end of February to 1.5% as of April 5 as recent high frequency economic indicators (ISM services, ISM manufacturing, construction spending) have proven weaker than expected. Financial conditions have tightened meaningfully over the last 12 months with the Federal Reserve of San Francisco's Proxy Federal Funds rate (a measure of the effective Fed Funds rate adjusted for quantitative tightening) reaching 6.27% as of March 31, 2023, a level not witnessed since the fall of 2000.

Given the significant level of monetary tightening already working through the financial system and conditions poised to tighten further as lending standards adjust to reflect recent stresses in the banking system, we believe the Federal Reserve has done its job. Economic growth is decelerating, inflationary measures are showing signs of exhaustion, job gains are slowing, job openings are declining, wage pressures are easing, and corporate earnings are being revised lower. All these factors, in our opinion, should provide sufficient grounds for the Federal Reserve to pause its pace of Federal Funds rate hikes.

That being said, a pause may not be enough in the near-term to give the market comfort as the Fed Funds Futures curve is currently pricing in three cuts this year (August, October and November) and five rate cuts in 2024. The bond market has similarly priced in a more dire economic outlook, with the two-year treasury yield moving from more than 5% to approximately 4% over the last four weeks. Therefore, while we ultimately expect the Federal Reserve policy transition to be a positive for the market, in the short-term the tug-of-war between the soft landing and recession narratives and ongoing fluctuations in treasury yields and Fed Funds futures curve is likely to continue to create a choppy and volatile backdrop for both the equity and bond markets. Not to mention residual fears of credit contagion within commercial real estate market, the looming debt-ceiling deadline and more persistent geopolitical tensions, which have the potential to add consternation to this already challenging market backdrop.

> **... HIGH AND DECELERATING INFLATION HAS HISTORICALLY PROVIDED A STRONG BACKDROP FOR SMALL CAPITALIZATION OUTPERFORMANCE, AS HAS SMALL CAPITALIZATION PERFORMANCE EXITING A BEAR MARKET AND RECESSIONS.**

Consequently, we believe the defensive posture of the market assumed in March is likely to persist blunting what we believed

was the start of a mean reverting outperformance cycle for small capitalization stocks. While the path in the short-term has been muddled by the reverberation of stresses in the banking system, over the long-term we continue to believe that after six consecutive years of relative underperformance for small capitalization stocks that a reversion to the mean is inevitable. Small cap valuations on an absolute basis and relative to both the S&P 500 and Russell 1000 remain at a significant discount to the long-term averages. Further, we believe we are closer to the end of the Federal Reserve tightening cycle as discussed above and according to a January 4th report from Furey Research, the Russell 2000, exiting the last six hiking cycles beginning in 1984, has posted positive forward returns on a median basis at 6 months, 12 months and 24 months annualized of +16.4%, +21.0% and +12.1%, respectively. In addition, high and decelerating inflation has historically provided a strong backdrop for small capitalization outperformance, as has small capitalization performance exiting a bear market and recessions. Lastly, after the longest consecutive losing streak for the Russell 2000 on record according to an April 4, 2023 report from Steve DeSanctis of Jefferies, small capitalization representation of the overall equity market has receded to less than 4%, meaningfully below its historical average of 7%. The last time small capitalization stocks had retreated to this level of the equity market was briefly in 2020 and prior to that, the 1930's. For all these reasons, Emerald remains optimistic that the small capitalization market leadership that began in earnest in January of 2023 is poised to resume as the market gains greater clarity on the forward path for economic growth.

Emerald, as always, remains vigilant and focused on utilizing our fundamental bottom-up research process to identify the most attractive growth opportunities within the small capitalization universe.

Top Ten Contributors
Reata Pharmaceuticals, Inc.
NeoGenomics, Inc.
Lantheus Holdings Inc.
Shift4 Payments, Inc.
Super Micro Computer, Inc.
Churchill Downs Inc.
TransMedics Group, Inc.
Freshpet Inc.
PDF Solutions, Inc.
Jack in the Box Inc.

Top Ten Detractors
National Vision Holdings, Inc.
Replimune Group, Inc.
Cutera, Inc.
AdaptHealth Corp.
NV5 Global Inc.
Pacific Premier Bancorp, Inc.
Amylyx Pharmaceuticals, Inc.
Aris Water Solutions, Inc.
ProFrac Holding Corp.
Cytokinetics, Inc.

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INTERNAL REPORT

Lantheus

Aug 31st 2022
Nishit Trivedi PhD / MBBS / MBA

(LNTH - NYSE)
Initial Report

Current Price	$77.37
52-week High	$86.60
52-week Low	$22.54
Price Target	$89.50

Rating	Buy
Shares Out	68.7M
Market Cap	5,318.6M
Avg. Daily Vol	1,205.7K

FY22 EPS	$3.57
EPS Growth Rate	25%
FY22 PE	21.7
FY22 PEG	0.3

Book Value/Share	$8.25
Cash/Share	$1.22
Insider Ownership	41%
Institution Ownership	34%

Business Description

Lantheus is a leader and fully integrated provider of innovative diagnostic imaging technologies. The company also has additional interest in targeted therapeutics and artificial intelligence solutions to Find, Fight and Follow various medical conditions. Lantheus classifies its products in three categories:

a) precision diagnostics,

b) radiopharmaceutical oncology and

c) strategic partnerships and other revenue.

Their leading precision diagnostic products assist healthcare professionals (HCP) find and follow diseases in non-oncologic conditions. Their radiopharmaceutical oncology diagnostics and therapeutics help HCPs find, fight and follow cancer. Their strategic partnerships focus on facilitating precision medicine through the use of biomarkers, digital solutions and radiotherapeutic platforms, and also includes their license of RELISTOR to Bausch Health Companies.

The company's commercial products are used by cardiologists, internal medicine physicians, nuclear medicine physicians, oncologists, radiologists, sonographers, technologists and urologists working in a variety of clinical settings.

The diagnostic products from Lantheus provide improved diagnostic information that enables HCPs to better detect and characterize, or rule out disease, with the potential to achieve better patient outcomes, reduce patient risk and limit overall costs for payors.

Competitive Advantages

- DEFINITY is a trusted brand with leading market share– Since its launch in 2001, DEFINITY has been used in imaging procedures in more than 18.0 million studies throughout the world. Lantheus estimates that DEFINITY had over 80% share of the U.S. segment for ultrasound enhancing agents in echocardiography procedures as of December 2021. For a product to have such a dominant market share 20 years post it's launch; it highlights the quality of the product and the ability of Lantheus to satisfactorily serve its customers over the past 2 decades. DEFINITY currently competes with Optison, a GE Healthcare product, Lumason, a Bracco Diagnostics' product, as well as echocardiography without ultrasound enhancing agents and non-echocardiography imaging modalities.

  DEFINITY is the leading ultrasound enhancing agent based on revenue and usage in the U.S. and is indicated for use in patients with suboptimal echocardiograms. Numerous patient conditions can decrease the quality of images of the left ventricle, the primary pumping chamber of the heart. The term DEFINITY includes its activated and non-activated forms. DEFINITY is a clear, colorless, sterile liquid that requires refrigerated storage, and which, upon activation in a VIALMIX apparatus, a medical device specifically designed for DEFINITY, becomes a homogenous, opaque, milky white injectable suspension of perflutren-containing lipid microspheres. After activation and intravenous injection, DEFINITY opacifies the left ventricular chamber and improves the delineation of the left ventricular endocardial border, or innermost layer of tissue that lines the chamber of the left ventricle. Better visualization of the left ventricle allows clinicians to make more informed decisions about disease status.

- **Specialized in-house manufacturing facility–** Lantheus has constructed a specialized in-house manufacturing facility at their North Billerica campus for the purposes of producing DEFINITY and, potentially, other sterile

vial products. Lantheus has also made substantial capital investments in their highly automated TechneLite production line and this along with their extensive experience in complying with the stringent regulatory requirements for the handling of nuclear materials create significant and sustainable competitive advantages for them in generator manufacturing and distribution.

- TechneLite is a self-contained system or generator of Tc-99m, a radioactive isotope with a six hour half-life used by radiopharmacies to prepare various nuclear imaging agents. Tc-99m results from the radioactive decay of Mo-99, itself a radioisotope with a 66-hour half-life produced in nuclear research reactors around the world from enriched uranium.

Assessment of Management

Lantheus is led by Mary Anne Heino as President and CEO of the company. Mary Anne brings to Lantheus 30 years of diverse pharmaceutical industry experience. She joined Lantheus in April 2013 as Chief Commercial Officer. She was promoted to Chief Operating Officer in March 2015 and to President and Chief Executive Officer in August 2015. Prior to joining Lantheus, Ms. Heino led Angelini Labopharm LLC and Labopharm USA in the roles of President and Senior Vice President of worldwide sales and marketing. Before that, Ms. Heino served in numerous capacities at Centocor, Inc., a Johnson & Johnson Company, including Vice President Strategic Planning and Competitive Intelligence, Vice President Sales, Executive Director Customer Relationship Management and Senior Director Immunology Marketing. On the financial side the company is led by Robert Marshall as CFO and Treasurer. Mr. Marshall joined Lantheus as Chief Financial Officer in September 2018. Mr. Marshall brings to the Company more than 30 years of finance experience including in M&A, capital markets and investor relations. Prior to joining Lantheus, Mr. Marshall spent 16 years with Zimmer Biomet Holdings, Inc. (NYSE: ZBH), a global medical device company with a leading position in musculoskeletal health. The Board comprises 9 members and is headed by Brian Markison who is a non-executive chairman of the Board. Mr. Markison is a seasoned executive with more than 30 years of operational, marketing, commercial development and sales experience with international pharmaceutical companies. We believe that Mary Anne is a very capable CEO instrumental in the growth of Lantheus over the past 9 years.

Growth Drivers

- **Rapid adoption of Pylarify** – PYLARIFY (also known as piflufolastat F 18 or PyL) is an F-18 labelled PSMA-targeted PET imaging agent used with PET/CT technology that enables visualization of lymph nodes, bone and soft tissue metastases to determine the presence or absence of recurrent and/or metastatic prostate cancer. PYLARIFY is indicated in the U.S. for PET imaging of PSMA-positive lesions in men with prostate cancer with suspected metastasis who are candidates for initial definitive therapy and in men with suspected recurrence based on elevated serum prostate-specific antigen ("PSA") levels.
    - PYLARIFY works by binding to PSMA, a protein that is overexpressed on the surface of more than 90% of primary and metastatic prostate cancer cells. PYLARIFY works with PET/CT technology to produce a combined PET/CT scan that enables the reader of the PET/CT scan to detect and locate the disease.

  According to the American Cancer Society, prostate cancer is the second most common cancer in American men. One in eight American men will be diagnosed with prostate cancer in their lifetimes and over 3.1 million American men are living with prostate cancer today.

    - **Advantages of PSMA PET Imaging**
        - Potential to improve disease localization, enhances therapeutic decision-making
        - PSMA PET can detect lesions between 4-8 mm, higher detection rate than conventional imaging
        - PSMA PET is effective at lower PSAs (prostate-specific antigen)
    - **PYLARIFY Supply Advantages**
        - Produced via cyclotron; US cyclotron network already supports 2+ million FDG doses on an annual basis
        - PYLARIFY network has already demonstrated ability to produce 40+ doses per batch; some locations produce 2 batches per day; 5 days per week
        - 110-minute half-life of F-18 allows for ~3 hour long transport and can be transported via flight

- Capacity to produce 150-200K PYLARIFY Doses in 2022

- **Size of the opportunity and opportunities to expand TAM** – We believe that approval of an F-18 agent like Pylarify is revolutionary in the ability to detect prostate cancer metastasis and it will see a very rapid adoption cycle within the physician community. Within prostate cancer, imaging is an incredibly important component of early detection of diagnosis and informing treatment. Conventional imaging, which has been the standard of care for many years has several challenges. Firstly it lacks sensitivity for early lesion detection. And second, it has limited utility in identifying metastatic prostate cancer at low PSA levels, potentially compromising therapeutic decision making.

  In Feb 2022, Lantheus management initially identified the PSMA PET imaging total addressable market in US at being $900M which was approximately 220,000 annual scans

  - 130,000 scans being in patients with suspected recurrence of prostate cancer and
  - 90,000 scans in patients with intermediate unfavorable, high or very high risk of suspected metastases of prostate cancer.

  Since then the company has expanded its TAM size

  In April 2022, Lantheus expanded the TAM size from 220,000 annual scans total addressable opportunity to 250,000 annual scans opportunity by adding another 30,000 scans in patients eligible for PSMA-targeted radioligand therapy. This expanded the opportunity to $1.1 Billion opportunity in United States.

- **Expansion of Pylarify in Europe with its partnership with Curium** – Curium one of the leading nuclear medicine companies in Europe announced on June 27th 2022 their submission of its marketing authorization application for [18F]-DCFPyL (Pylarify) to the European Medicines Agency. The submission comes two months after completing its Phase III PYTHON trial of [18F]-DCFPyL and follows two US pivotal trials – OSPREY and CONDOR by Progenics Pharmaceuticals, Inc., a Lantheus company. We believe that the EU market would likely benefit from access to Pylarify in 2023 with more meaningful revenue opportunity in 2024.

- **Pipeline and R&D projects** – An interesting alliance that Lantheus has is with GE-Healthcare. This has been a long term agreement with GE Healthcare since 2017 when they announced the signing of a definitive license agreement for the continued Phase III development and worldwide commercialization of flurpiridaz F 18. Flurpiridaz is an investigational positron emission tomography (PET) myocardial perfusion imaging (MPI) agent that may improve the diagnosis of coronary artery disease (CAD), the most common form of heart disease.

Issues / Risks

Risk from competition to Pylarify:

- With Pylarify being the main growth driver for Lantheus the major risk arises from competition and if competition would be able to take market share from Lantheus. Amongst its competitors are Telix Pharmaceuticals, Novartis and others.
- Supply chain issues with sourcing radio-active materials may effect the revenue and profitability of the company and its ability to serve its customers.

Summary and Recommendation

We recommend investing in Lantheus because we believe that Pylarify approval is a significant product for Lantheus and is a diagnostic agent that has had one of the fastest market uptakes in US since gaining approval in 2021. We believe that Lantheus is one of the fastest growing profitable diagnostic companies in the Russell 2000 growth index and we feel management has done an excellent job with the launch of Pylarify which now represents more than 50% of their revenue. Our Price target on Lantheus is $89.50 which is 22X our 2023 EPS expectations of $4.06.

Financial Summary

LNTH

Annual Results	FY21A	FY22E	FY23E
Revenue	425.2M	898.7M	1007.2M
EPS	-1.06	3.57	4.06
Y-Y Rev Growth	25.3%	111.4%	12.1%
Y-Y EPS Growth	324.3%	-438.0%	13.6%

Comments

Estimates reflect sell-side consensus

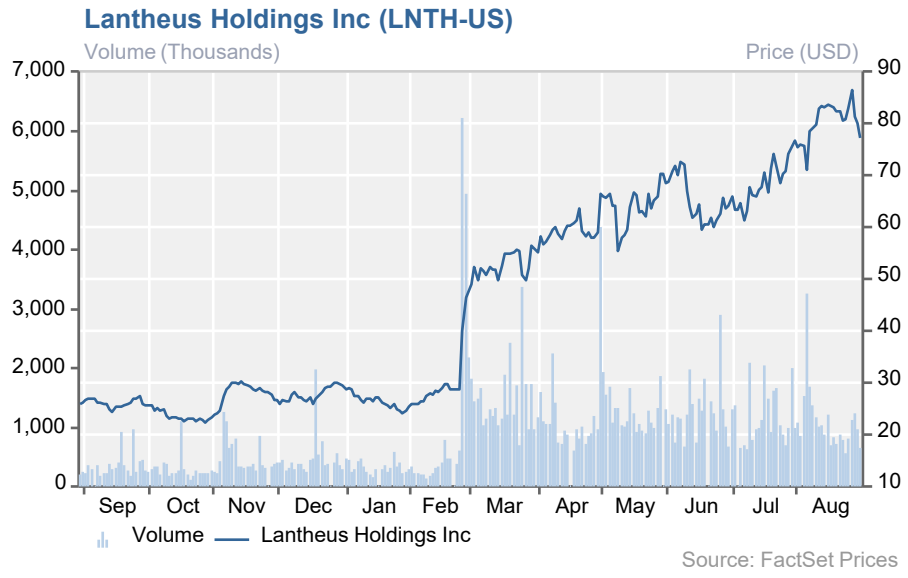
FY0a	3-21	6-21	9-21	12-21
Revenue	92.5M	101.1M	102.1M	129.6M
EPS	0.13	-0.39	-0.20	-0.59

FY1e	3-22	6-22	8-22	12-22
Revenue	208.9M	223.7M	223.7M	237.7M
EPS	0.61	0.61	0.61	0.88
Y-Y Rev Growth	125.8%	121.4%	119.2%	83.4%
Y-Y EPS Growth	361.1%	#N/A	#N/A	#N/A

Additional Data

Current Price	77.37
12-month High	86.6
12-month Low	22.54
FY End	12/2021
Dividend	0
Shares Outstanding	68.7M
Shares Short	2.6M
Avg Daily Vol	1,205.7K
Cash and ST Invest	98.5M
ST & LT Debt	192.9M

Updated: 8/31/2022



Medical Diagnostics		FY End	Share Price	52-wk High	52-wk Low	Market Cap. ($M)	EV ($M)	FY2022 EPS	FY2023 EPS	FY2022 P/E	FY2023 P/E	FY2022 Rev ($M)	FY2023 Rev ($M)	FY2022 EBITDA	FY2023 EBITDA	FY2022 EV/EBITDA	FY2023 EV/EBITDA
Lantheus Holdings Inc	LNTH	Dec	$50.47	$86.60	$24.28	$3,356.3	$3,401.2	$3.84	$4.03	13.1x	12.5x	$916.6	$1,028.3	$427.62	$390.93	8.0x	8.7x
Natera, Inc.	NTRA	Dec	$40.89	$93.39	$28.13	$4,343.9	$4,353.2	($5.63)	($4.65)	-7.3x	-8.8x	$819.1	$993.3	($525.66)	($438.33)	-8.3x	-9.9x
NanoString Technologies, Inc.	NSTG	Dec	$7.76	$42.76	$5.86	$321.4	$382.9	($3.08)	($2.12)	-2.5x	-3.7x	$126.1	$174.8	($102.45)	($61.62)	-3.7x	-6.2x
Guardant Health, Inc.	GH	Dec	$27.16	$100.49	$25.44	$2,606.0	$3,197.5	($6.30)	($5.24)	-4.3x	-5.2x	$445.3	$561.9	($503.40)	($441.80)	-6.4x	-7.2x
Exact Sciences Corporation	EXAS	Dec	$50.16	$82.54	$30.35	$8,671.0	$10,700.9	($3.72)	($2.53)	-13.5x	-19.8x	$2,035.8	$2,266.7	($207.91)	($27.84)	-51.5x	-384.3x

INTERNAL REPORT

PDF Solutions, Inc.

27th June 2022
Nathan Jones, Ph.D., MBA

(PDFS – NASDAQ)
Internal Report

Current Price	$19.83
52-week High	$33.25
52-week Low	$17.47
Price Target	$37.00

Rating	Buy
Shares Out	37.0M
Market Cap	732.8M
Avg. Daily Vol	124.2K

FY22 EPS	$0.34
EPS Growth Rate	30%+
FY22 PE	58.7
FY22 PEG	#N/A

Book Value/Share	$5.68
Cash/Share	$0.33
Insider Ownership	12%
Institution Ownership	70%

Business Description

PDF Solutions was founded in 1991 by Drs. John Kibarian and Kimon Michaels while at Carnegie Mellon University. They focused on yield and manufacturability issues in semiconductor manufacturing for leading-edge processes. During the past 30+ years they have adapted from being a reactive company (solving problems when yield issues occur), to a proactive model (by applying their infrastructure on a node-by-node basis to generate royalty revenues), **and finally to a SaaS-based model (continuous monitoring for defects on a subscription basis).** They are currently expanding towards enterprise-wide engagements across multiple nodes, factories, and applications, ranging from technology development, design for manufacturability (DFM), ramp, and process control. They have assembled the type of expert team that is needed to continue to adapt and solve the problems that semiconductor companies face in their manufacturing processes.

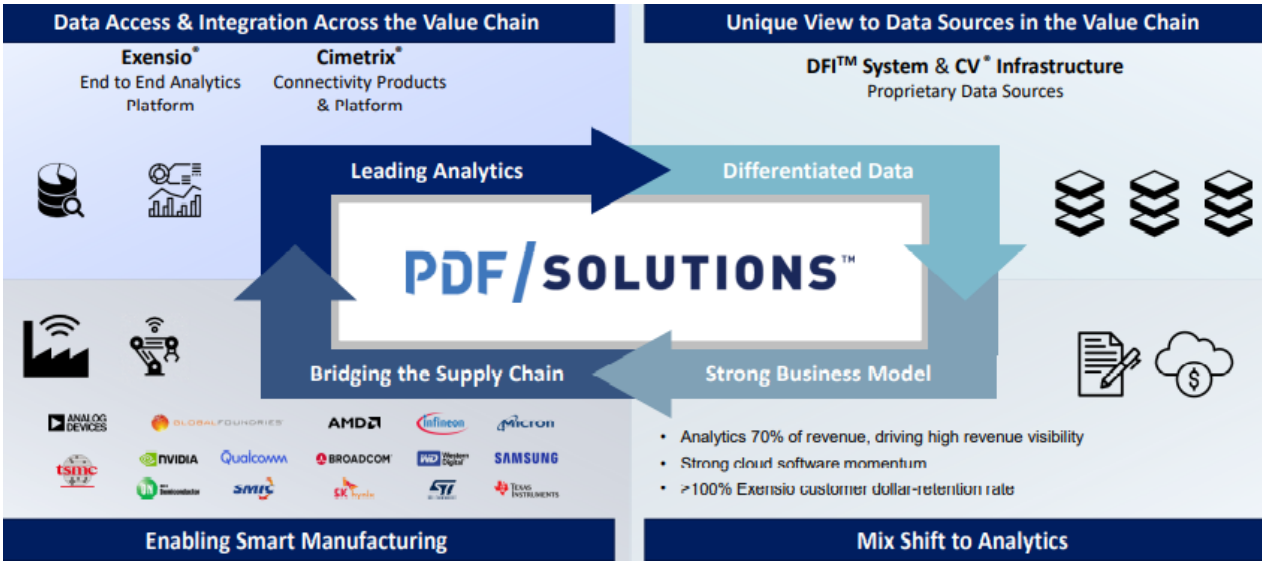


Figure 1. PDF Solutions provides solutions throughout the integrated circuit (IC) life cycle. PDF's integrated analytics infrastructure includes Exensio analytics platform, Cimetrix connectivity products/platform, process control software, characterization vehicle (CV) test chips, custom testers, design-for-inspection (DFI) systems, and a benchmarking database.

Competitive Advantages

- **PDF Solutions allows clients to introduce new products more quickly, at lower cost and better quality, and with high yields in large volume.** PDF Solutions helps with design-to-process matching (ensuring cost and performance), new product introduction (accelerating time-to-product qualification), and volume manufacturing solutions (through process characterization, six-sigma continuous improvement, and automated process control methodology). PDF works with 18 of the top 20 semiconductor manufacturers and invests 35% of revenues in R&D to ensure continued improvement in their products and services. With their acquisition of Cimetrix, they are now the only provider of analytics, differentiated data, and connectivity (Figure 2).

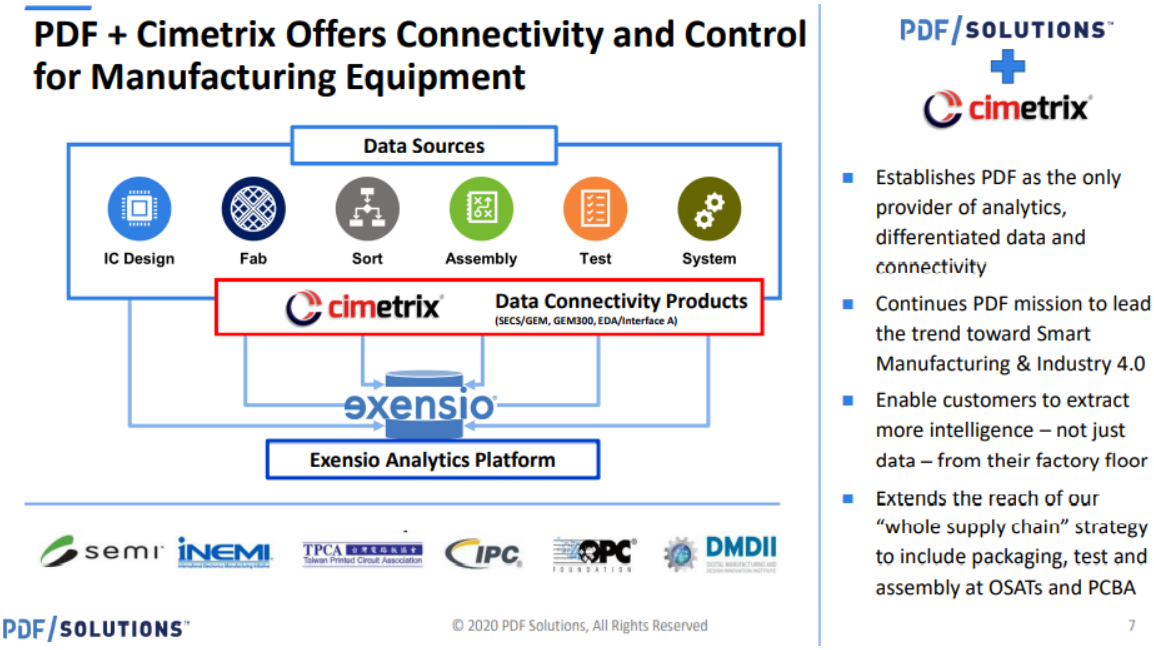


Figure 2. PDFS' platform expansion has increased significantly through the addition of data analytics software as well as the acquisition of Cimetrix, which offers significant cross-sell opportunity into the whole IC supply chain, including advanced packaging, test, OSATs, and PCBA.

- **PDF has no direct competitor as they have minimal overlap with traditional EDA vendors, and there are extremely high barriers to entry –** With their proprietary hardware and software, PDFS performs electrical testing of test chips in parallel and run them quickly with a cheaper, faster tester. They have conducted >55 yield ramp projects at 90nm and below, which is more than any other company in the world. This has allowed them to collect orders of magnitude more test chip measurements than any other company, resulting in PDF Solutions' expert knowledge of yield loss sources and superior infrastructure. PDF benchmarks common yield problems at different foundries and nodes, which is also key to their improvements. PDF generates >100X more information per unit silicon area per unit time than any other company. This shortens turnaround time on diagnostic analysis from months to days. They have an efficient team for ramping yields, improving time to market by several multiples. In addition, EDA companies Cadence and Siemens (through Mentor Graphics acquisition) don't do anything with manufacturing analytics software. Synopsys has been most aggressive within the market for manufacturing analytics software after they bought Qualter. However, lots of integration that needs to happen to make the data experience work for the customers across disparate tools and locations, so it is unlikely this will ever be a major investment area for Synopsys in terms of direct competition.
- **PDF Solutions is the leader & industry standard in independent, commercial electrical characterization –** PDF solutions has grown within the industry as a complement to traditional inspection and metrology methods, and their primary competition used to be internal foundry teams stitching together their own technology from internal efforts and external point tool suppliers. But PDF is rapidly becoming a 'need' to have cloud-based software platform that cannot be replicated internally. Other companies that perform optical testing (i.e. KLA-Tencor) or SEM testers (Hermes, Applied Materials) are NOT competitors of PDF Solutions. KLA-Tencor can catch big problems that can be seen (e.g. those caused by contamination or alignment issues), and as such KLA testers will always be essential for foundries. SEM testers made by Hermes or Applied can catch small electrical issues, if they know where to look (not high-throughput enough to test entire wafers). PDF sits in between KLA-Tencor and SEM testing, as they catch very small problems in non-specific areas through probabilistic models and mapping. These are problems that optical testers miss due to noise inherent in advanced nodes, and SEM testers miss them because they don't know where to look. The majority of new problems with smaller and smaller nodes fall into the category that PDFS can address, and no one else is capable of replacing them. PDF essentially 'steals' part of the internal budget that already

exists for metrology and inspection set aside for internal groups, and foundries are amenable to using PDF because they can capitalize a portion of the expense.

- **Within their ~400 employee base, >80% are engineers and >>>100 have Ph.Ds. –** Because of PDF's roots as an IP company in a technologically advanced industry, an extremely well-qualified and well-educated employee base is essential. Consulting used to be the primary delivery mechanism of their IP technology to their clients to ensure rapid results, though that has been rapidly replaced by software-as-a-service solutions in recent years. PDF Solutions' IP is comprised predominantly of three components. One is a Characterization Vehicle infrastructure which incorporates test vehicle structures and design of experiments, proprietary pdFasTest hardware, and analysis software. The second major component is software infrastructure components used in ramping and controlling semiconductor processes, most notably their Exensio "big data" system. Exensio used to be sold as part of the 'fixed fee' component of an integrated yield ramp, but has been almost entirely transitioned to 3-year average life SaaS contracts. The third component is a virtual design technology for creating highly manufacturable product layouts at advanced nodes called 'design for inspection' or DFI.
- **Rapidly growing list of partnerships across different types of test companies –** The first company to truly recognize PDF's differentiated analytics software was **Advantest, which invested $65M in PDF in exchange for 3.3M shares in stock ($19.70/share) in mid-2020** (Figure 3). This agreement includes a minimum in $50M in subscription purchase commitments over 5 years, though we believe the true number will dwarf this amount (see growth driver section for SAM estimate). Since the Advantest partnership, PDF has announced similar deals (without an equity component) with companies such as Siemens, IBM, and Kulicke and Soffa. We believe the unique capabilities of their analytics software will make them a necessity in the future of the semiconductor industry.

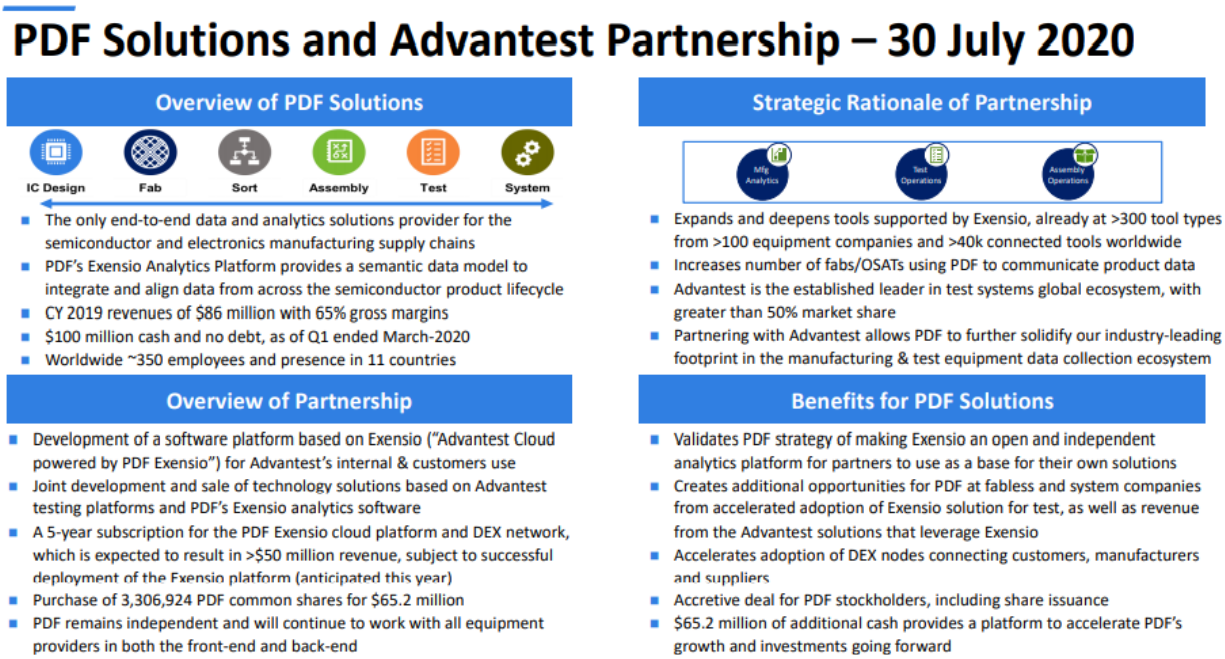


Figure 3. Overview of Advantest partnership. Other test and tool companies have followed suit by striking similarly-structured deals with PDF, though notably lacking an equity component (minimizes dilution).

Assessment of Management

John Kibarian, Ph.D., co-founder, and CEO – John founded the company with a focus on yield and manufacturability issues in semiconductor manufacturing for leading-edge processes. We believe his technical expertise and 30+ years of experience in the industry make him an ideal CEO to run the business.

Adnan Raza, CFO – Adnan joined PDF in 2020 as EVP of Finance. Prior to PDF, Adnan was SVP of corporate development at Synaptics from 2014-2019. In addition, he worked on Wall Street at Goldman Sachs and UBS prior to his tenure in the semis industry. He also worked at AT&T Bell Labs on high-speed communications systems and

has both an Electrical Engineering degree and an MBA from Cornell and Wharton, respectively. We view the breadth and depth of his technical and financial expertise as very attractive for a first-time CFO.

Executive compensation at PDF is reasonable, and there is a moderate level of institutional ownership (70%). Their board is comprised of four outside members and two inside members, and insiders own ~12% of the 30M shares outstanding, which we view as attractive.

Growth Drivers

- **PDF's Exensio platform could be employed on any tool involved in process control and test within the semiconductor industry, which we believe is a $3B+ SAM –** Currently, PDF's analytics software is compatible with ~300 tool types from >100 equipment vendors, and we think this will expand over time. Their analytics software installed base is ~40k tools in total, and management believes there are several million total tools on which their software can be utilized. In fact, *Advantest alone provides a 40k+ installed base of tools on which PDF can expand, plus they sell an additional 2-3k tools per year*. With over 100 tool vendors already compatible, we believe that PDF's current ~$100M analytics run rate is at most ~1% penetrated within their total *current* SAM, and we believe precedent exists for multi-billion dollar SaaS platforms within the semiconductor industry, most notably Cadence and Synopsys. While PDF's inflection towards profitable growth is admittedly very nascent, we think this inflection is just getting started as they continue to add more modules, partners, and end customers over the coming years.
- **M&A opportunities such as Cimetrix plus the significant cross-sell opportunities this enables –** PDF acquired Cimetrix relatively recently, which provided them with important connectivity solutions as well as as a number of cross-sell opportunities for their Exensio platform. Many customers are opting to utilize Exensio to control various WFE robots and then use Cimetrix visualization, menus, tools, and chambers. In addition, Cimetrix provides customers a communication port for downloading a recipe, and helps technicians decide whether to keep producing product or shut down if there's an issue and in those cases also provides backup data. We believe there is a high degree of synergy between the businesses, and after the strong success they've seen with Cimetrix (by far their largest acquisition to date), we would expect them to continue to augment growth with strategic M&A to build out their platform (now that they've proven they can do a large deal successfully).
- **Addition of more modules and a nascent renewal cycle –** PDF is embarking on a nascent renewal cycle, given the fact that they started the analytics software transition in 2018, and the typical contract length is 3 years. While the renewals are early, so far some of the largest customers are renewing at rates >50% larger than their initial contract, which we view as a testament to their continued innovation and addition of new modules. For example, through AI/ML advancements they are adding more automated reporting features as well as a module called 'GuidedAnalytics' with a function called 'AnalyzeThis', which tells users exactly where to look for manufacturing errors as well as how to solve them. We believe the additional data that this will generate should create a virtuous cycle of upsell opportunities for many renewal cycles in the future. Management believes they should easily be able to triple the average current accounts over time just with currently available products/modules, all while adding additional customers, modules, and supported tools/vendors over time as well. We thus believe there are a plethora of growth vectors that should enable PDF to create a very large SaaS platform over the long term with limited direct competition.
- **PDF Solutions has considerable operating leverage, which should enable outsized earnings growth –** Overall revenue growth should be ~5X industry, but we believe opex should grow at ~0.6X revenues (i.e. ~40% contribution margin) as they shift from a 'node-by-node' model to enterprise-wide SaaS engagements. This should enable substantial FCF generation and enable them to generate very high ROIC in future periods while their profitability scales rapidly. We believe they can expand operating margins from currently <10% to >30% over the next many years.
- **Entry into the memory space with process control and data analytics –** Memory is hitting its scaling limit, and PDF's analytics software is perfect for helping with advanced 3D architecture, which they see as a big opportunity because of their ability to create unprecedented models and virtual prototypes/structures to give insight into potential production problems. Their technologies are also applicable to batteries, solar, and other adjacent markets, but most of these are not ready for a solution like PDF's yet. These represent longer-term growth drivers as these markets move down the technological advancement curve, likely necessitating process control and analytics software solutions that PDF can provide.

Issues / Risks

- **Foundry consolidation and customer concentration -** The semiconductor industry has consolidated into just a few huge advanced logic manufacturers, and the loss of a major customer or inability to attract additional customers presents a significant risk to revenue. Their market segment risk is aligned with foundry risk, though they are confident they can outpace this segment in various market conditions.
- **Technological advancements -** Chip design and manufacturing technology changes rapidly, and an inability on PDF Solutions' part to keep pace with the technological needs of the industry presents a risk to future business.
- **PDF Solutions' model transition can be risky and cause non-linear results –** Because PDF deals with a relatively small number of very large customers and there is an ongoing model transition towards SaaS, it can make results less uniform and lumpy during this phase. While the majority of this risk is behind them, gainshare royalty revenues still represented ~10% of revenues in 2021 so there is still a modest amount of risk remaining as that tapers down further. We believe PDF will begin to issue formal annual guidance at some point in the near future as they gain more visibility, which should mitigate this risk to a large degree.

Summary and Recommendation

PDF Solutions' data analytics technology is becoming more and more essential as foundries and fabless semiconductor companies transition to smaller and smaller nodes. In addition, PDF continues to build out their partner network, building upon their initial partnership with Advantest and layering in Siemens, IBM, and most recently Kulicke and Soffa. In fact, Kulicke even mentioned the PDF partnership on their recent earnings call, suggesting to us that much larger partners see the value of PDF's analytics software and believe it can be a growth driver for them as well as PDF. We expect long-term topline growth to be in the 25% range with strong margin expansion towards 30%+ operating margin over the next many years. PDF reported an almost 100% y/y increase in analytics revenue in Q4 ($14.5M grew to $27.2M), partly offset by volume-based royalty revenue decline of -64% y/y to $2.6M from $7.4M. Total company revenues increased 33% y/y in Q4 and 26% y/y for the full year despite royalty revenue declines of >50% for 2021. Going forward, we continue to believe that the 30%+ growth rate will be sustained throughout 2022 against very easy royalty-related comparisons in 2H22, creating a natural acceleration. In addition, backlog +60% y/y in 2021 plus bookings up >40% y/y in 2021 are both supportive of natural acceleration against easy royalty comps. We believe the current pullback is simply a reaction to a very conservative initial guide for 2022 as well as currently tepid market for semi stocks. We note that the company is embarking on its first renewal cycle and noted on their recent earnings call that one of their largest customers renewed at 50%+ above original contract, and they expect to see solid double-digit growth from most customers as they layer in more modules and additional tools. The company wants to do an analyst day this fall, which we believe could be a catalyst. They wanted to get at least partially through their first renewal cycle before giving more granularity. We think it'introduce new key metrics and target model, which should help crystallize the opportunity in investors' minds. This is reminiscent of Supermicro, which was also underfollowed but took a major leap forward last year with their first-ever analyst day just as the business was inflecting. We think PDF is in a very similar spot given the software transition and underfollowed nature of the stock. We think that the bookings growth of 90%+ in Q1 against an increasingly difficult bookings comp suggests a similar inflection point is on the horizon for PDF (they grew bookings at a very impressive >40% in 2021). **We think they should grow at least 30% this year given their swelling backlog and exceptional bookings as well as the aforementioned easier royalty comps; we estimate $178M/$0.75 revs/EPS for FY23E, and we apply a 7X EV/revs multiple to arrive at our $37 PT and BUY rating.** This is a very high P/E of ~49X, but we think it is well warranted given the early stage of inflection and strong scalability of the model. We believe the model could support 40% op margins as they gain scale over the next many years vs. just 9% consensus for FY23. With uniquely strong growth coupled with substantial margin expansion on the horizon, we think EV/revs is more appropriate than P/E at this early stage. While the market is not very accommodating towards these names at the moment (those lacking scaled profitability), we do think 3.7X EV/revs is meaningfully too cheap, especially when closest peers Cadence and Syopsys trade at ~8X and ~11X, respectively. 7X is still a healthy discount to these peers, and thus why we believe it is justified, in our view. **Hence why we recommend to BUY stock now, as we look at recent weakness as a gift if we have capacity to add more software exposure in small cap. As noted, closest peer group trades ~8-11X but they aren't growing nearly as fast and do not have the same opportunity for margin expansion (as many of the peers' operating models/margins are already fully scaled).**

Financial Summary

PDFS

Annual Results	FY21	FY22	FY23
Revenue	111.1M	137.2M	162.9M
EPS	-0.58	0.34	0.66
Y-Y Rev Growth	26.1%	23.5%	18.7%
Y-Y EPS Growth	-50.6%	-157.9%	97.0%

FY11	3-21	6-21	9-21	9-21
Revenue	24.2M	27.4M	29.6M	29.6M
EPS	-0.21	-0.12	-0.06	-0.06

FY12E	12-21	9-12	9-12	12-12
Revenue	33.5M	22.5M	22.6M	23.8M
EPS	-0.11	0.22	0.21	0.24
Y-Y Rev Growth	33.6%	22.2%	13.3%	13.3%
Y-Y EPS Growth	-46.3%	-281.5%	-424.6%	-228.1%

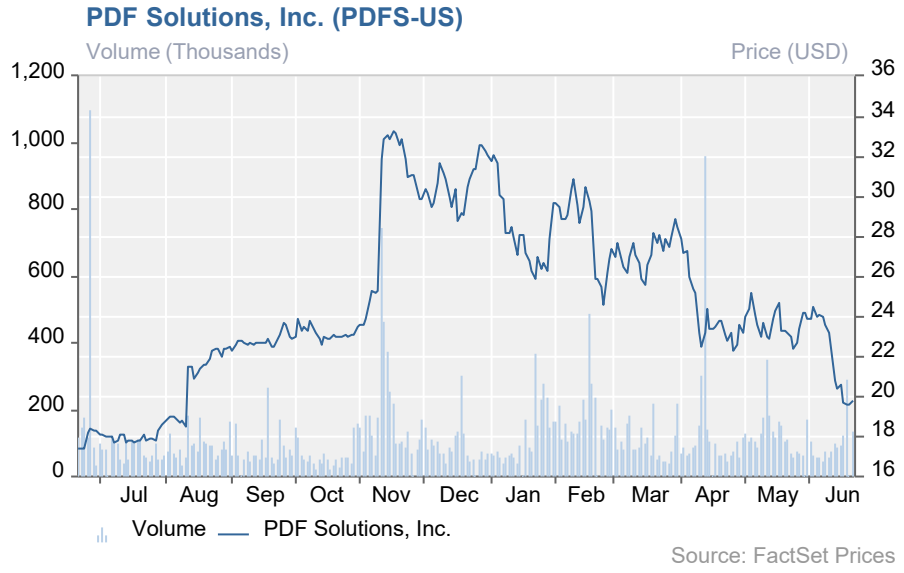
Comments

Estimates reflect sell-side consensus

Additional Data

Current Price	19.83
12-month High	33.25
12-month Low	17.47
FY End	12/2021
Dividend	0
Shares Outstanding	37.0M
Shares Short	0.5M
Avg Daily Vol	124.2K
Cash and ST Invest	140.2M
ST & LT Debt	7.0M

Updated: 30-Oct-2012



EDA companies and other design software		FY End	Share Price	52-wk High	52-wk Low	Market Cap. ($M)	EV ($M)	FY2022 EPS	FY2023 EPS	LT Growth Rate (%)	FY2022 P/E	FY2023 P/E	FY2022 Rev ($M)	FY2023 Rev ($M)	FY2022 EV/rev	FY2023 EV/rev	FY2022 EBITDA	FY2023 EBITDA	FY2022 EV/EBITDA	FY2023 EV/EBITDA
PDF Solutions, Inc.	PDFS	Dec	$19.83	$33.25	$17.47	$732.8	$604.6	$0.34	$0.66	25.00	59.2x	30.0x	$137.2	$162.9	4.41x	3.71x	$13.30	$25.60	45.5x	23.6x
Cadence Design Systems, Inc.	CDNS	Dec	$148.14	$191.65	$133.00	$40,850.9	$40,064.0	$3.93	$4.44	16.50	37.7x	33.4x	$3,418.4	$3,755.5	11.72x	10.67x	$1,444.95	$1,657.64	27.7x	24.2x
Synopsys, Inc.	SNPS	Oct	$302.22	$375.59	$260.83	$46,230.7	$45,235.5	$8.55	$9.85	19.28	35.4x	30.7x	$5,012.7	$5,627.0	9.02x	8.04x	$1,779.65	$2,045.81	25.4x	22.1x
Autodesk, Inc.	ADSK	Jan	$166.88	$342.27	$164.31	$36,258.4	$37,726.4	$6.55	$7.92	#N/A	25.5x	21.1x	$5,015.2	$5,708.6	7.52x	6.61x	$1,919.60	$2,276.33	19.7x	16.6x
Altair Engineering Inc. Class A	ALTR	Dec	$52.34	$80.73	$49.37	$2,723.0	$4,025.4	$0.81	$0.94	#N/A	64.6x	55.7x	$578.1	$631.5	6.96x	6.37x	$103.24	$120.47	39.0x	33.4x
ANSYS, Inc.	ANSS	Dec	$235.33	$411.22	$227.70	$20,471.4	$20,703.8	$7.82	$8.68	11.51	30.1x	27.1x	$2,050.8	$2,243.5	10.10x	9.23x	$936.18	$1,055.44	22.1x	19.6x
						$24,544.5	$24,726.6			#N/A	42.1x	33.0x			8.29x	7.44x			29.89x	23.25x
	Inputs																			
	FY0	2022																		
	FY1	2023																		

HEITMAN

Heitman America Real Estate Trust

Quarterly Report

March 31, 2023



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Note: Heitman America Real Estate Trust (the "Fund" or "HART") is comprised of Heitman America Real Estate Trust, L.P. and Heitman America Real Estate Trust (PF#1), L.P.

Note: The property on the front cover is Perris Circle, Perris, CA. Perris Circle is a current investment of the Fund. Photos used in this report were selected based on visual appearance and are used for illustrative purposes only. There can be no assurance that the Fund will be able to originate loans on similar properties in the future or that future investments will be profitable or made on similar terms. Please see "Portfolio Summary" for a current list of the Fund's investments. An investment in the Fund is speculative and involves risk, including but not limited to those related to real estate investments.

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Portfolio Highlights

Life Storage I – Scottsdale, AZ

Fund Profile

FUND OVERVIEW

Inception Date	January 4, 2007
Fund Term	Perpetual-life, open-ended
Risk Profile	Core
Risk Controls	– Up to 15% in value-added properties – Maximum of 30% leverage at Fund share – No more than 15% in a single property
Min. Investment	$5 million
Closings	Closings occur quarterly

KEY STATISTICS AS OF MARCH 31, 2023

Gross Asset Value	$12,985 million
Net Asset Value	$9,865 million
Net Asset Value Per Share	$1,432
Cash as % of NAV	2.4%
Number of Investments	111
Number of Properties	358
Leverage Level	23.6%
Leased Percentage	95%
Current Quarter Acquisitions	$9.0 million
Current Quarter Distributions	$83.7 million
Current Quarter Dividend Yield (Gross/Net)	0.81%/0.64%
Trailing One Year Dividend Yield (Gross/Net)	3.39%/2.66%
Since Inception Dividend Yield (Gross/Net)	4.62%/3.91%

OBJECTIVE

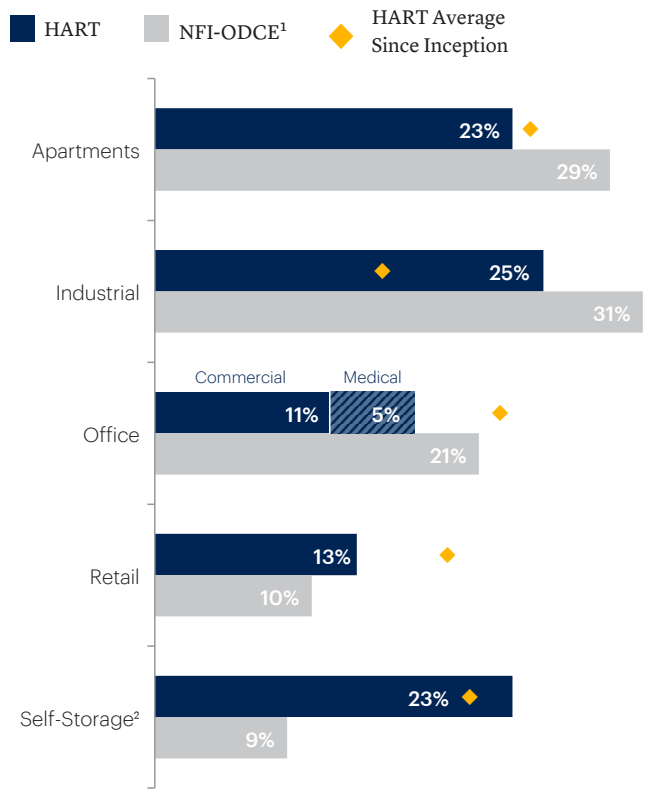
Create a high-quality, low-risk portfolio of stabilized, income-producing assets diversified by property type and economic exposure by acquiring assets:

- In infill locations within major metropolitan areas
- With strong site attributes, such as proximity to amenities, employment centers and transportation networks
- That are well-constructed, with features that we believe will appeal to tenants over long periods of time
- Through incorporation of Environment, Social, and Governance ("ESG") principles and risk mitigation into the investment process[1]

1. The Fund considers ESG factors in the total mix of data used to make investment decisions. In addition to ESG factors the Fund will weigh other considerations with equal and in some cases preferred prominence.

PROPERTY TYPE DIVERSIFICATION

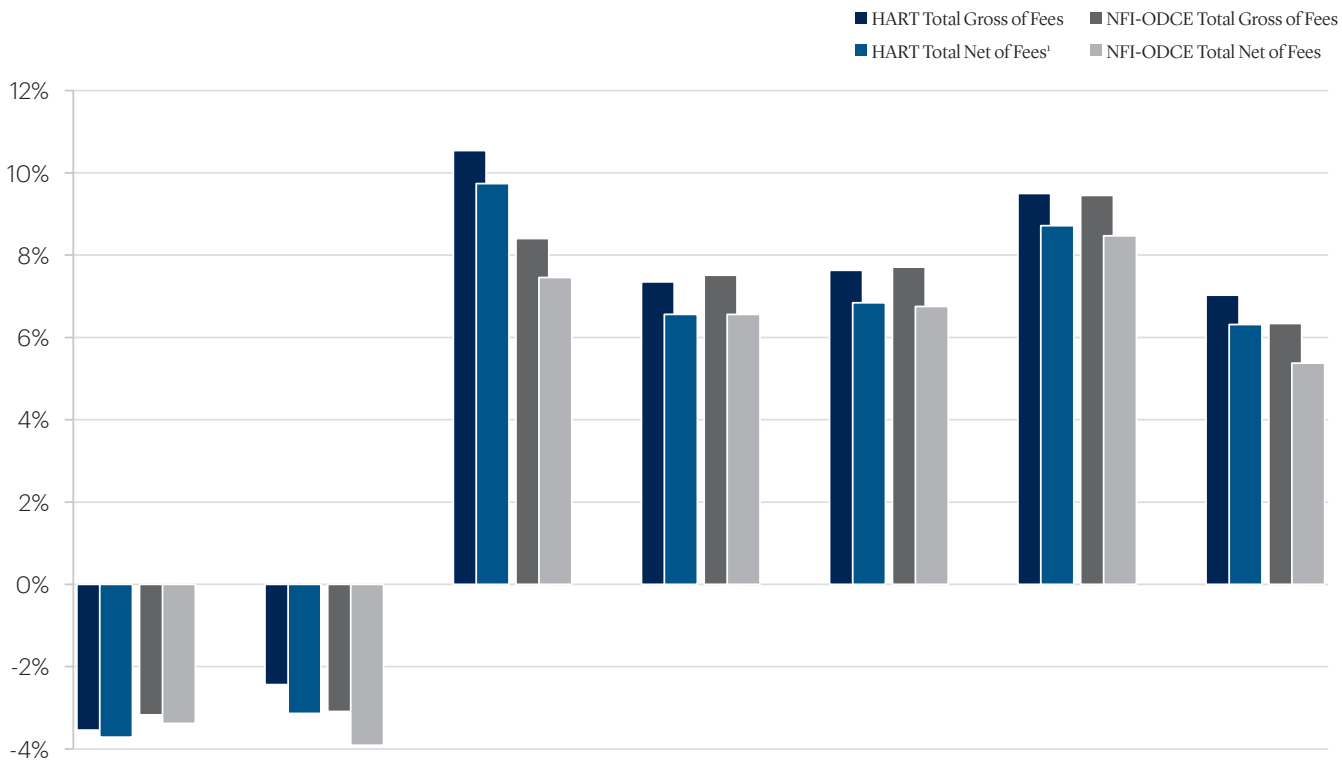
BASED ON FUND GROSS VALUE



1. NFI-ODCE = NCREIF Fund Index - Open End Diversified Core Equity.
2. NFI-ODCE allocation includes 3% to Self-Storage, 2% to Healthcare, and 4% to Other.

Performance

TIME-WEIGHTED INVESTMENT LEVEL LEVERAGED PERFORMANCE RETURNS



	3 Month (not annualized)		Trailing 12-Month		3 Year		5 Year		7 Year		10 Year		Since Inception April 1, 2007[1]	
	HART	NFI-ODCE	HART	NFI-ODCE	HART	NFI-ODCE	HART	NFI-ODCE	HART	NFI-ODCE	HART	NFI-ODCE	HART	NFI-ODCE
Income	0.89%	0.84%	3.61%	3.35%	4.02%	3.70%	4.23%	3.90%	4.34%	4.04%	4.59%	4.31%	5.03%	4.79%
Appreciation (Depreciation)	-4.43%	-4.00%	-5.90%	-6.27%	6.33%	4.57%	3.02%	3.51%	3.18%	3.56%	4.75%	4.97%	1.93%	1.48%
Total Gross of Fees	-3.54%	-3.17%	-2.44%	-3.09%	10.54%	8.40%	7.35%	7.51%	7.63%	7.71%	9.50%	9.45%	7.03%	6.34%
Fund vs. NFI-ODCE Gross of Fees	-0.37%		+0.65%		+2.14%		-0.16%		-0.08%		+0.05%		+0.69%	
Total Net of Fees	-3.71%	-3.38%	-3.14%	-3.91%	9.74%	7.46%	6.56%	6.56%	6.84%	6.75%	8.72%	8.47%	6.31%	5.38%
Fund vs. NFI-ODCE Net of Fees	-0.33%		+0.77%		+2.28%		0.00%		+0.09%		+0.25%		+0.93%	

Note: Total Return= $\frac{\text{Net Income + Capital Appreciation}}{\text{Weighted Average Equity}}$

1. Net of fee performance is reflective of the actual fees received by the Fund. Investors may incur fees that are higher or lower than those presented.
2. The since inception return begins on April 1, 2007, the first full quarter of operations after the limited partners' initial capital contribution.

Letter to Partners

STATE OF THE FUND

The current economic backdrop features uncertainty, inflationary pressures, and Federal Reserve (the "Fed") actions which have been oriented toward tightening, although we may see a pause in interest rate increases. Additionally, during the first part of 2023, we have seen failures in some regional banks. Set against this changing economic backdrop, in our opinion, Heitman America Real Estate Trust (the "Fund") is well positioned across the various property sectors to provide favorable relative performance.

The Fund produced a -3.54% gross and -3.71% total net return for Q1 2023, including an income return of 0.89% gross and 0.72% net, and depreciation of 4.43%. The trailing 12-month gross and net returns were -2.44% and -3.14%, comprised of a 3.61% gross and 2.88% net income return, and depreciation of 5.90%. The Fund's total gross and net returns underperformed the NFI-ODCE Benchmark ("ODCE", or the "Index") by 37 basis points ("bps") and 33 bps for the quarter, respectively. The Fund's total gross and net returns outperformed the Index by 65 bps and 77 bps, respectively, for the trailing 12-months. Subsequent to quarter-end, on April 20, 2023, a dividend of $12.15 per share was paid to investors, resulting in quarterly gross and net dividend yields of 0.81% and 0.64%, respectively, and trailing 12-month gross and net dividend yields of 3.39% and 2.66%, respectively. The Fund's income return continued to outpace the Index and has now evidenced relative outperformance for 14 consecutive years on an annual basis.

The value of the Fund's assets declined in the first quarter across all property sector portfolios, with the most significant value decreases impacting the office, apartment, and industrial assets. On an overall basis, the Fund's valuation decrease for the most recent quarter was driven primarily by increases in valuation metrics (higher discount rates and capitalization rates) with a modest offset by increased forward cash flow projections. While private real estate valuations have moved inward during the last quarter of 2022 and the first quarter of 2023, we believe more valuation trimming is necessary for the sector to come into alignment with the capital markets environment and pricing adjustments that have occurred in other asset sectors.

The Fund's overall portfolio ended the quarter at a leasing level of 95%, approximately 3% higher than the 92% leasing level as of calendar year end 2022. The increase in leasing level is primarily attributable to the execution of a lease during Q1 2023 for the entirety of the recently delivered Logistics Center Phoenix industrial development. Normalized same-property net operating income ("NOI") for the 12-month period ended March 31, 2023, compared to the prior 12-month period, grew 4.2%. This increase was primarily driven by increased rents in the apartment and self-storage sectors resulting from strong tenant demand, as well as higher re-leasing spreads in the industrial sector, partially offset by higher vacancy in the office sector.

One add-on acquisition in an existing self-storage joint venture was completed during the quarter for a gross purchase price totaling $9.0 million at the Fund's share. The add-on acquisition is consistent with the Fund's self-storage investment strategy and complements the existing 15-store Life Storage III Portfolio, which was acquired in Q3 2022, by further supporting the portfolio's market diversification objective and by adding an asset in a market with low competition and saturation levels.

Additional investor equity follow-on commitments from two existing investors totaling $120.2 million became available to the Fund during Q1 2023. During the quarter, additional requests for liquidity were received from six investors totaling $96.5 million. Requests for redemptions now total $1.66 billion as of March 31, 2023, up from $1.60 billion as of December 31, 2022.

The Fund's overall portfolio saw a leasing level of 95% at the end of Q1 2023

Letter to Partners

LOOKING FORWARD

As we move through the first half of 2023, we observe indications of markets cooling, despite also seeing continued strength in some key economic indicators. Increases in prices of goods and services continue at a pace above sustainable long-term levels, although the growth in those measures is generally slowing. The employment market remains strong, but manufacturing markers indicate slowing demand. The net of these various market indicators leads us to conclude that we are at the beginning of a long-anticipated economic slowdown, the magnitude of which will not be clear for some time.

As we consider the continued likelihood of slowing economic conditions as the year progresses, we are keenly focused on operating signals from the portfolio. We expect to see moderation in the pace of growth of NOI across the portfolio. For sectors such as industrial, apartments, and self-storage, where the recent pace of increase has been strong, we anticipate the rate of growth to slow. The office sector assets will contribute a negative growth trajectory, but recently completed leasing and lease renewal activity will slow that negative trend. The retail sector assets are expected to turn the corner to produce positive NOI growth for the year. Despite a return to more normal seasonal patterns for the self-storage and apartments sectors, occupancy levels for the portfolio overall are expected to remain stable.

As we observe valuation metrics for private real estate, and for the Fund's portfolio, we anticipate additional adjustments to valuations are likely as the year unfolds. Many factors that are exogenous to the private real estate sector will impact the magnitude to which further valuation adjustments will be necessary in order to achieve greater harmony with historical relative measures. Portfolio positioning will play an important role, on a relative basis, as this valuation process unfolds. We expect that the Fund will benefit from a lower allocation to the commercial office sector and a dedicated allocation to self-storage, while a modest underweight to the industrial sector may temper the outcome.

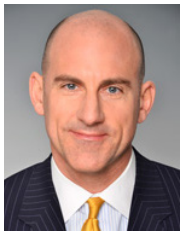
Capital capacity is expected to continue to be the most significant challenge for the Fund in the short term. In our opinion, asset valuation uncertainty continues to negatively influence the fluidity of transactional markets. An important aspect of the strategic plan is efficiently executing on the disposition of assets for which we have completed the business plan, or where there is a portfolio shaping objective. Current market conditions present significant headwinds as we look to execute tactical elements of that plan. So, while there is no guarantee of our ability to be successful in a transactions environment that remains muted, we do intend to explore selective investment sales in the near-term.

Given the capital markets backdrop that we are operating in, we have been judicious in managing the Fund's capital resources. Liquidity has become a scarce commodity in the capital constrained environment. In terms of the debt financing profile for the Fund, our overall use of leverage in the capital structure will be managed to the targeted level in the mid 20% range, and we will continue to focus on addressing upcoming debt maturities, which are reasonably limited in the near-term. We will continue to be cautious regarding the use of the Fund's line of credit capacity.

Understanding that current circumstances present challenges as you look to achieve various objectives, we appreciate your continued support as we navigate the Fund during this volatile period. We remain confident that a consistent commitment to a long-term perspective in the management of the Fund will continue to deliver favorable long-term outcomes.

We hope that you will be able to join us for Heitman's Annual Investor Meetings which will be held in Chicago on June 6 and 7, 2023. The Fund's Annual Meeting is scheduled for the afternoon of June 6, 2023. After three years of virtual meetings, we are delighted to spend time with you discussing matters important to the Fund.

We expect to see moderation in the pace of growth of NOI across the portfolio





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US Economic Outlook

The US economy deferred a widespread deterioration of economic conditions during Q1 2023, however, Heitman believes that a difficult year and a probable recession still lie ahead. The impact of the Fed's historical run-up of interest rates became evident in cooling inflation and a slightly weaker labor market in Q1 2023. However, in addition to the issues that the US economy has been grappling with over the past several months, new risks emerged during the quarter in the form of Silvergate Capital Corp.'s liquidation, followed by the receiverships of Silicon Valley Bank and Signature Bank. These events roiled markets and raised questions about the possibility of contagion in the banking sector and financial markets. In our opinion, the US federal government's response may have allayed immediate fears among a subset of investors, but the steep decline in regional bank equities and the more pronounced inversion of the yield curve suggests a recession in 2023. These pressures in the banking system have reduced lending activity and weakened overall financial conditions. This evidenced stress may be beginning to assist the Fed in advancing its objective of cooling the economy and stabilizing inflation.

The Consumer Price Index ("CPI") decelerated in February and March 2023 after a typical spike in the January data.[1] Headline Personal Consumption Expenditures Price Index ("PCE"), the Fed's preferred measure of inflation, was up 5.0% year-over-year as of February 2023, down 30 bps from the previous month.[2] Core PCE, which excludes food and energy, also decreased in February, down 10 bps from January to 4.6%.[3] While we believe this downward trend somewhat justifies the Fed's aggressive monetary policy to date, inflation remains stubbornly above their 2.0% target. Price increases remain largely driven by housing costs and prices tied to core services, which were up 9.1% and 5.0%, respectively, in February.[4] Chairman Powell has indicated that the Fed views the labor market as the main channel by which inflation can be reined in, as the pace of wage growth and services inflation are directly related.[5]

The labor market has started to show signs of a slowdown but remains on relatively solid ground. Job gains moderated in every month of Q1 2023; however, the three-month moving average of this metric remained above pre-pandemic levels at 345,000. Average hourly earnings also continued to climb in March 2023, growing by 0.3% month-over-month. The February 2023 Job Openings and Labor Turnover Survey report hinted at future deterioration of the labor market as the number of job openings fell for a second consecutive month. Job openings were below 10 million for the first time since May 2021, a likely indication that businesses are growing wary of additional headcount.[6] Job openings will have to continue to trend downwards if they are to move closer to the pre-pandemic levels of roughly seven million.[7] Heitman believes that further deterioration of the labor market will be necessary to relieve price pressures that are being driven by wage and services inflation.

Risks to the economy have grown considerably given the recent regional bank failures and concerns that they will create widespread contagion. Even if the fallout from the regional bank failures remains relatively contained, heightened volatility is likely to persist for some time. While inflation remains above the Fed's long-term target, turmoil in the financial system complicates its path forward in terms of the magnitude of further rate increases. While Heitman believes the Fed will likely pause rate hikes, we do not foresee rate cuts happening in 2023. Most forecasters continue to expect a mild recession in the second half of 2023, but risks are weighted to the downside.[8]

The Fed views the labor market as the main channel by which inflation can be reined in

1. U.S. Bureau of Labor Statistics (April 12, 2023). Consumer Price Index Summary, March 2023
2. U.S. Bureau of Economic Analysis (February 2022). Personal Income and Outlays, February 2022
3. U.S. Bureau of Economic Analysis (February 2022). Personal Income and Outlays, February 2022
4. Moody's Analytics (March 31, 2023). Economic Roundup: All Eyes on "Supercore" Inflation.
5. Moody's Analytics (March 31, 2023). Economic Roundup: All Eyes on "Supercore" Inflation.
6. All claims and data prior to this come from: Oxford Economics (April 7, 2023). US: Strong labor market will keep the Fed on track for higher rates
7. Oxford Economics (March 10, 2023). US: The labor market cools from blistering to just plain hot
8. Oxford Economics (March 16, 2023). US: Economic strength delays the start of the recession



Fundamentals & Operations

Foundry Square IV – San Francisco, CA

Apartments

Apartment demand rebounded in Q1 2023, but fell short of expectations.[9] Net absorption of 19,043 units was a welcome reversal after three straight quarters of negative demand, but was roughly 25% of RealPage's projected demand for the quarter. With quarterly deliveries of 95,237 units, the second highest tally for a quarter in over 20 years, occupancy dropped another 40 bps to sit at 94.8%. This is still roughly in line with the average of 94.6% since 2000. Month-over-month rent movements have been lagging typical seasonal trends for the past few quarters. We observed month-over-month declines in excess of trend during Q4 2022, and now lower positive increases in Q1 2023. Year-over-year effective rent growth sat at 4.5% as of Q1 2023, down from 15.3% in Q1 2022. The largest deceleration in rents has been observed in previously hot Sunbelt markets like Phoenix and Las Vegas, which are now seeing year-over-year declines in rent. Florida, the US coasts, and the Midwest are proving to be the most resilient going into Q2 2023.[10]



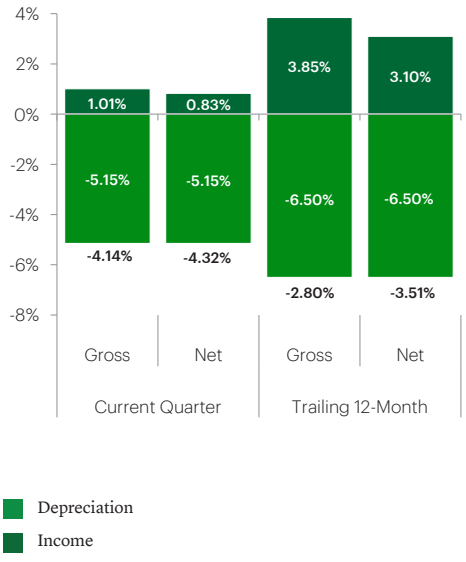
Biltmore at Camelback – Phoenix, AZ

Cooling demand and record-high construction is factoring into subdued rent growth projections from third-party forecasters. As of Q1 2023, over one million units were under construction, an all-time high. Over 350,000 units were delivered in the four quarters ending Q1 2023, an 8% increase year-over-year. And over 611,000 units are set to be delivered over the next four quarters. With this dynamic at play, rent growth projections for 2023 now range from roughly 1.5% (CoStar) to 3.0% (Yardi Matrix and RealPage).[11] [12] [13] The RealPage market-level projections are along a relatively narrow range between 0.7% (Phoenix) to 5.0% (West Palm Beach) for 2023. Below-average growth is expected in the west (e.g., Sacramento, Salt Lake City, Portland) and lower-growth Midwestern markets (e.g., Kansas City, Milwaukee, Minneapolis). Above-average gains are expected in Florida, Austin, Dallas, and the suburban Bay Area.[14]

The apartment portfolio currently represents 23% of the Fund's GAV, which compares with the Q1 2023 NFI-ODCE weighting of 29%. The portfolio's same-property NOI increased by 17.2% over the preceding 12-month period. Revenue increased by 12.0% and expenses increased by 4.5%. Leasing levels are starting to show a seasonal improvement heading into the Spring leasing season. The portfolio's leased percentage of 96% was 1% higher than at the end of Q4 2022 and mirrored leasing levels in Q1 2022. Concessions are being offered in select markets such as Chicago, Denver, Santa Monica, Seattle, and White Plains. However, they have been utilized less frequently throughout the portfolio than in the prior 12 months. The decline in concessions combined with continued favorable new and renewal lease trade-outs led to the portfolio's strong revenue growth. Expenses throughout the portfolio continue to increase, led by payroll, repairs and maintenance, insurance, real estate taxes, and contract services.

Florida, the US coasts, and the Midwest markets are proving to be the most resilient for the apartment sector going into Q2 2023

APARTMENT TIME-WEIGHTED RETURNS*



* Time-weighted returns shown include all of the HART portfolio's apartment sector. The full portfolio's time-weighted returns can be found on page 3.

Past performance is not necessarily indicative of future results. There can be no assurance that the Fund will be able to acquire similar properties in the future or that future acquisitions will be on similar terms, or the Fund will achieve comparable results, be able to effectively implement its investment strategy, achieve its investment or asset allocation objectives or avoid substantial losses.

9. RealPage: Apartment Demand Rebounds in Q1 After Weak 2022; April 6, 2023
10. RealPage, Data Direct export, accessed on 4/17/2023
11. Yardi Matrix: Special Report: Multifamily Rent Forecast Update; January 2023
12. RealPage, Data Direct export, accessed on 4/17/2023
13. CoStar; Data export, accessed 1/20/2023
14. RealPage, Data Direct export, accessed on 4/24/2023

Industrial



LogistiCenter Exit 8A – Northern NJ

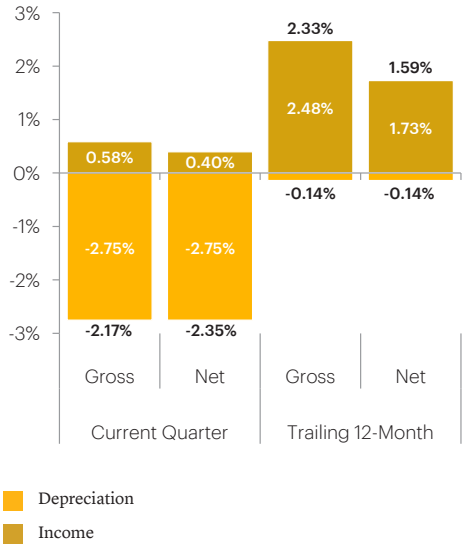
We believe the US industrial market has entered the "late expansion" phase of growth as supply has exceeded new demand for each of the past three quarters. Demand remains positive but fell sequentially as net absorption totaled 74 million square feet ("msf") in Q1 2023, after exceeding 100 msf for each of the prior nine quarters. For context, the demand reading in the first quarter would be in line with the average quarterly net absorption from 2018-2019. Supply strongly outpaced demand as deliveries totaled 152 msf in the quarter. This combination led to a 40 bps increase in the vacancy rate, to 4.1%. While this was the fastest pace of vacancy rate increase since 2009, the current vacancy rate remains comfortably below its average of 6.6% since 2000. Sublease availability showed a notable uptick, from 80 msf to 99 msf nationally over Q1 2023, but remains below 2020 levels as a percentage of stock. Overall, we believe US industrial is on trend for a "soft landing" as vacancy rates and rent growth trend towards historical averages over the next year or two.[15]

We expect that despite some deterioration in fundamentals, 2023 will be a relatively smooth year for the industrial sector. REITs forecast 2023 rent growth between 5% and 15% by market (based on coastal versus non-coastal geography), with a nationwide average of 10% growth per Prologis.[16] Though we expect the vacancy rate is expected to tick up over the year due to 741 msf of new construction underway, vacancy rate changes flow through to market rent growth with a lag and are thus more concerning for 2024 readings.[17] [18] Positively, NOI growth at portfolio levels will remain robust for several more years due to widespread ability to mark leases up to market levels upon expiration.[19] Lastly, construction has come in significantly, with starts 46% below 2022 averages for Q1 2023.[20]

We believe the Fund's industrial portfolio continued its 2022 performance with another strong quarter to start 2023, despite continued headwinds in the economy and capital market disruption manifesting in the second half of 2022. The portfolio's same-property NOI increased by 7.1% for the trailing 12-months over the preceding 12-month period. With the execution of a full-building lease at the Phoenix development during Q1 2023, the portfolio achieved a 99% leasing level compared to 94% at the end of the prior quarter. The sector weighting to industrial has increased slightly to 25%, despite the Fund's overall industrial sector valuations decreasing 2.7% (at share). Despite macroeconomic challenges, we expect strong NOI growth in 2023 as the portfolio realizes substantial income growth on properties with near-term lease expirations. In terms of recent leasing activity during the most recent quarter, a new lease with UNIS was executed for the Phoenix development for 915,160 square feet ("sf") with commencement occurring in April 2023 at a rental rate 20% above original proforma expectations.

We believe US industrial is on trend for a "soft landing" as vacancy rates and rent growth trend towards historical averages

INDUSTRIAL TIME-WEIGHTED RETURNS*



* Time-weighted returns shown include all of the HART portfolio's industrial sector. The full portfolio's time-weighted returns can be found on page 3.

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15. All claims and data prior to this come from the "Industrial Q1 2023" file which is derived from Heitman Research's analysis of CoStar data (aggregated data industrial real estate, 10,000 sf and greater, across 51 US geographies, compiled on 4/4/2023).
16. Green Street "Industrial Sector Update – Still Flexing Rent Growth Muscles" released 3/7/2023, page 11
17. "Industrial Q1 2023" file which is derived from Heitman Research's analysis of CoStar data (aggregated data industrial real estate, 10,000 sf and greater, across 51 US geographies, compiled on 4/4/2023).
18. Heitman Research, "Rent Growth For Real – Industrial Rent Growth Forecast Thinkpiece"
19. Green Street "Industrial Sector Update – Still Flexing Rent Growth Muscles" released 3/7/2023, page 14
20. Industrial Q1 2023 file

Office

The US office market is reeling from the combined impacts of work-from-home arrangements and a slowing economy, and is being cited as the potential, proverbial "next shoe to drop" in the regional banking crisis.[21] The nation's top 30 office markets had a combined vacancy rate of 17.7% as of Q1 2023, growing 50 bps over the course of the quarter to this series' highest rate in over 30 years. Over the past five quarters, available sublease space has expanded from 142 msf to 193 msf. Currently, 3.8% of all inventory is available for sublease, with 22.5% in total available. Demand has now been negative for five consecutive quarters, with the worst reading of those five quarters occurring in Q1 2023 (-21 msf). Since the onset of the COVID-19 pandemic, the total demand destruction in US office currently totals -155 msf.[22] Leasing, which leads to demand in future quarters, was down 10.7% quarter-over-quarter, having fallen for three quarters straight.[23] With broad-based weakness amid rising interest rates, and already a few major CMBS defaults, it's no surprise that economists and analysts across the financial and real estate sectors are concerned about contagion from US office loans, of which 55% are estimated to sit on bank balance sheets.[24] [25]



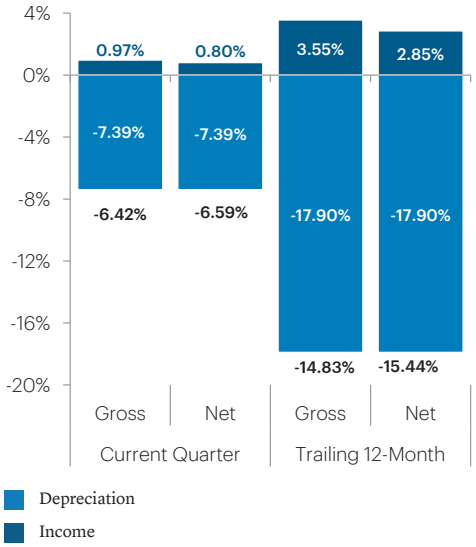
28 State Street – Boston, MA

We believe that the office sector will continue to display weak fundamentals, with any initial rebound constrained to specific segments of the market within certain geographies. For example, higher quality office space is performing better across markets (and we believe that it will be the quickest to recover), but in tech-heavy submarkets where sublease space is rising fastest, all market segments are currently weakening.[26] Green Street posits that non-tech Sunbelt markets (e.g., Orlando, Phoenix, and Charlotte) are less susceptible to damage from work-from-home policies and offer better demographic growth, suggesting that these markets currently look most attractive for long-term office investing.[27]

The office portfolio represents 16% (11% commercial office and 5% medical office) of the Fund's GAV at quarter-end. Operationally, the portfolio's same-property NOI decreased by 12.6% for the recent 12-month period over the preceding 12-month period, driven primarily by Belkin vacating their space in Campus at Playa Vista at lease-end in December 2021, in combination with rising expenses across the sector, specifically real estate taxes. The portfolio's leasing level decreased 1% quarter-over-quarter to 89% as a result of a two-floor tenant vacating at First Hill Medical Pavilion in Seattle pursuant to the lease expiration. During Q1 2023, we executed three renewals at 353 North Clark in Chicago that accounted for 7.2% of the building's net rentable square footage. Each renewal was for a full floor, with one of the tenants downsizing from two floors to one and another tenant possessing the capability to expand by a full floor once they finalize headcount related to a recently completed acquisition. Although we have been successful in renewing tenants in-place, office fundamentals sector-wide face headwinds as tenants continue to work through their real estate needs.

US office demand has now been negative for five consecutive quarters

OFFICE TIME-WEIGHTED RETURNS*



* Time-weighted returns shown include all of the HART portfolio's offic sector. The full portfolio's time-weighted returns can be found on page 3.

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21. CNN Business, "American offices are half-empty. That could be the next big risk for banks", published 4/10/2023 American offices are half-empty. That could be the next big risk for banks | CNN Business
22. All uncited claims and data prior to this come from the "Office Q1 2023" file which is derived from Heitman Research's analysis of CoStar data (aggregated data office real estate, 20,000 sf and greater, not owner-occupied and unknown owner type, across 30 sampled US geographies, compiled on 4/4/2023).
23. JLL, "United States Q1 2023 Office Outlook"
24. ULI Urban Land Magazine, "Cracks Appearing in U.S. Office Sector Lending; More Pain Ahead?", published 3/13/2023 Cracks Appearing in U.S. Office Sector Lending; More Pain Ahead? - Urban Land Magazine (uli.org)
25. CNN Business, "American offices are half-empty. That could be the next big risk for banks", published 4/10/2023 American offices are half-empty. That could be the next big risk for banks | CNN Business
26. JLL, "United States Q1 2023 Office Outlook"
27. Green Street, "Apartment and Office Sectors: D.C. Metro Property Tour Takeaways", published 4/19/2023

Retail



Shops at Wailea – Wailea, HI

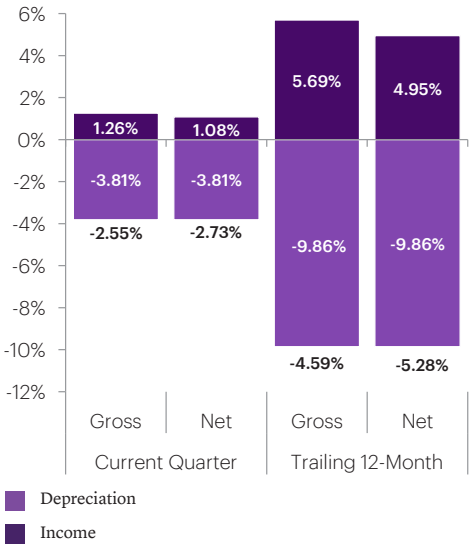
Shopping center relevant sales growth averaged 8.2% year-over-year in Q1 2023, 180 bps faster than the previous quarter's pace. However, much of this growth was frontloaded by January's stronger-than-anticipated increase in spending of 10.5% year-over-year.[28] We believe declining sales growth in February and March 2023 is an early indication of the consumer pullback anticipated to occur as consumer conditions worsen at the hands of tighter lending conditions and a softer labor market. Price pressures have eased in recent months; however, real sales growth also declined during every month of the quarter, ending March with essentially flat real sales growth of 0.3% year-over-year.[29] Foot traffic trends also reflect consumer pullback, as 2023 traffic has averaged roughly 3.0% below 2022 and pre-pandemic levels, with declines steepening as the year progresses.[30]

Nationwide net absorption declined in Q1 2023, but limited new supply kept vacancy flat quarter-over-quarter at 5.8%. Vacancy held steady or decreased for all formats except for malls, which saw a 10 bps increase quarter-over-quarter. All open-air formats, except for lifestyle centers, saw a decline in absorption from Q4 2022; however, net absorption remained positive for these formats. Net absorption for malls improved by nearly 1.0 msf quarter-over-quarter to -0.9 msf. [31] We remain cautiously optimistic about retail property fundamentals as retailers generally entered 2023 in a healthier position than they did a year ago. Additionally, weakness in consumer spending was broadly anticipated and has not negatively impacted retailers' plans for openings.[32] Heitman believes that supply and demand dynamics favor property fundamentals as a continually shrinking amount of development and consistent appetite for space in quality locations is driving down vacancy and keeping a floor under rents.

The Fund's retail allocation for the quarter remains at 13%, which is 3% above the Q1 2023 NFI-ODCE allocation of 10%. The retail portfolio continues to experience softer customer shopping patterns relative to the prior year, evidenced in the quarterly foot traffic data. Foot traffic for Q1 2023 trended 5% below 2022 as the open-air assets trailed 3% below 2022, while the enclosed mall assets decreased 8%. Despite the unfavorable traffic comparisons, the portfolio did show a slight improvement over Q4 2022's trend of -6% year-over-year. Same-property NOI for the portfolio increased 2.3% for the recent 12-month period over the preceding 12-month period. The portfolio's leasing level at quarter-end was 92% including one department vacancy (94% excluding this space), and the assets continue to experience strong leasing activity. Over the course of Q1 2023 and the initial days of Q2 2023, the asset team executed several leases at multiple open-air assets, most notably with retailers such as Athleta, Burlington, Five Below, and Lovesac. Additionally, lease negotiations continue with prospective tenants which are expected to be completed over the course of 2023.

We remain cautiously optimistic about retail property fundamentals as retailers generally entered 2023 in a healthier position than they did a year ago

RETAIL TIME-WEIGHTED RETURNS*



* Time-weighted returns shown include all of the HART portfolio's retail sector. The full portfolio's time-weighted returns can be found on page 3.

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28. US Census Bureau (accessed on April 14, 2023). Advance Monthly Sales for Retail and Food Services
29. US Census Bureau (accessed on April 14, 2023). Advance Monthly Sales for Retail and Food Services
30. Placer.ai data (accessed on April 18, 2023). National foot traffic by category through April 15, 2023
31. All claims and data prior to this come from the "Retail Q1 2023" file which is derived from Heitman Research's analysis of CoStar data (aggregated data of existing, under construction, and under renovation shopping centers of various formats for 75 US geographies, compiled on 4/7/23. Formats include community center, lifestyle center, neighborhood center, power center, strip center, and regional mall).
32. Telsey Advisory Group (April 19, 2023). TAG Insights: Store Openings & Closing Analysis

Self-Storage



Life Storage I Portfolio – Various US

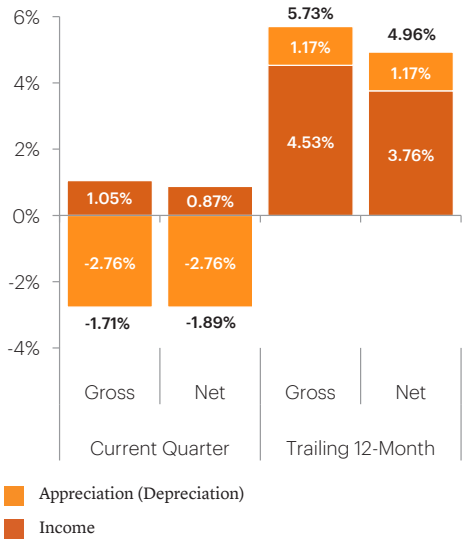
The pandemic-induced boost to self-storage fundamentals continues to fade with operations now settling into a more typical seasonal pattern. Occupancy in Heitman's same-store pool, which peaked at more than 95% in July 2021, appears to be bottoming at a March 2023 rate of 90.2%, matching its rate at the end of 2022. Similarly, street rates that started to decline on a month-to-month basis in July 2022 leveled out at $15.94 per square foot ("psf") in November, and have since increased by 3.0% to a March 2023 rate of $16.41 psf. We anticipate more rapid increases with the onset of the busy Spring leasing season. Our effective in-place rate during March of $17.34 psf is up 6.8% from a year ago, but new leasing will not be accretive to revenues until street rates climb back above in-place levels. In-place rent growth continues to be strongest in Florida, which includes the top five markets. Year-over-year growth ranges from 10.4% in Miami to 14.7% in the Cape Coral/Fort Myers MSA.[33]

Transaction volume, like other sectors, has slowed dramatically in recent quarters given uncertainties about the economy and higher interest rates.[34] The big news this quarter was the announced merger of Extra Space ("EXR") and Life Storage ("LSI") that is expected to close in the second half of 2023. The combined company will consist of more than 3,500 stores, making it the largest in the industry by store count. Extracting private market pricing implications is challenging because of the all-stock deal nature. However, Green Street stated in an April 3, 2023, report that EXR is paying more than their ascribed private market value of LSI's portfolio.[35] Green Street currently utilizes an applied 5.0% cap rate in valuing LSI's portfolio.[36]

The Fund's dedicated allocation to the self-storage sector stood at 23% of GAV at the end of Q1 2023. The self-storage portfolio's performance is moderating after coming off record highs, but fundamentals remain strong. The portfolio's same-property NOI increased by 8.5% for the recent 12-month period over the preceding 12-month period. Occupancy ended the quarter at 89%, down 290 bps from Q1 2022 for the same-store pool. Move-in volumes have been slow to start the year, which is muting market rent growth, however rental revenue growth continues to be supported through existing customer rent increases and extended lengths of stay. Including stabilization of fees, other income, and bad debt write-offs, year-over-year revenue growth increased 7.0%, down from 8.6% last quarter. Much of that growth is attributable to the Florida and Sunbelt markets. Inflationary pressures are impacting portfolio expenses, which grew 4.3%. Higher insurance premiums, utility rates, and maintenance costs are contributing to expense increases. The portfolio is anticipated to experience more normalized growth as increasing economic headwinds slow customer traffic and prior year comparisons become more difficult. However, several value-added expansion projects in the Life Storage, Metro, and iStorage portfolios are being completed and will provide revenue growth as the additional square footage is leased-up.

Self-storage transaction volume slowed dramatically in recent quarters given uncertainties about the economy and higher interest rates

SELF-STORAGE TIME-WEIGHTED RETURNS*



* Time-weighted returns shown include all of the HART portfolio's self-storage sector. The full portfolio's time-weighted returns can be found on page 3.

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33. Self-storage fundamentals data cited above is sourced from Heitman's same store pool of 367 stabilized properties, spread throughout the US with various joint venture partners. Stabilized stores include any store that has reached and maintained 85%+ occupancy for 18 months, excluding any stores with major expansions or natural disasters. Forward-looking statements are based on Heitman's budgets for 2023.
34. Self-storage transaction volume and cap rates come from a variety of subscription-based sources including Green Street, Real Capital Analytics, and Yardi Matrix. Due to the incomplete nature of the data, Heitman research fills in gaps with internal underwriting, and sales comparable data from brokers, appraisers and partners. For this reason, the data is estimated to the best of our abilities.
35. "Paying Extra for Life Storage," Green Street Advisors; April 3, 2023.
36. "Weekly REIT Pricing Review," Green Street Advisors; April 14, 2023.



Portfolio Summary

1225 Old Town – Chicago, IL

Portfolio Summary

($ IN THOUSANDS)

Investment Name	Year Acquired	Location	Effective Fund Ownership Percentage[1]	No. of Assets	Total Owned Square Feet/ Units[2]	Leasing Level[3]	Fund Capitalization[1] Gross Value	Property Level Third Party Debt[4]	Net Value	Cash Invested[5]
Apartments										
15 Bank	2010	White Plains, NY	100.0%	1	501 units	94%	$ 217,000	$ 92,306	$ 124,694	$ 82,378
Villas at River Oaks	2012	Houston, TX	100.0%	1	288 units	98%	62,600	-	62,600	49,859
AO Santa Monica	2012	Santa Monica, CA	100.0%	1	350 units	95%	225,000	81,681	143,319	99,972
Commons Park West	2013	Denver, CO	100.0%	1	340 units	96%	164,200	-	164,200	121,202
1225 Old Town	2013	Chicago, IL	100.0%	1	250 units	99%	156,000	-	156,000	165,993
Folio	2014	Austin, TX	100.0%	1	606 units	98%	162,000	50,575	111,425	41,986
Biltmore at Camelback	2014	Phoenix, AZ	100.0%	1	270 units	97%	121,000	-	121,000	78,033
OneEleven	2015	Chicago, IL	75.0%	1	504 units	94%	239,282	96,552	142,730	164,349
The Taylor	2015	Dallas, TX	100.0%	1	308 units	98%	117,000	-	117,000	120,288
Premiere on Pine	2015	Seattle, WA	100.0%	1	386 units	95%	226,000	-	226,000	247,927
The Porter Del Ray	2017	Alexandria, VA	100.0%	1	276 units	96%	130,000	52,531	77,469	46,583
Cambridge Park	2017	Cambridge, MA	100.0%	1	312 units	94%	212,000	-	212,000	182,017
Avalia Boca Raton	2018	Boca Raton, FL	100.0%	1	297 units	94%	194,000	-	194,000	127,934
Square on Fifth	2018	Atlanta, GA	100.0%	1	230 units	100%	162,000	77,241	84,759	64,722
Radius at 15th	2018	Minneapolis, MN	100.0%	1	200 units	100%	96,000	-	96,000	77,326
The Sawyer Providence Farm	2018	Charlotte, NC	100.0%	1	404 units	97%	155,000	-	155,000	99,023
Halo 46	2018	Tampa, FL	100.0%	1	158 units	100%	65,400	-	65,400	51,818
The Ashborough	2021	Ashburn, VA	100.0%	1	504 units	95%	213,000	-	213,000	161,305
Total - Apartments				**18**	**6,184 units**	**96%**	**2,917,482**	**450,886**	**2,466,596**	**1,982,715**
Industrial										
Chicago Industrial Portfolio	Various	Various IL	100.0%	12	4,606,268	99%	518,700	94,996	423,704	220,363
West Coast Industrial Portfolio - CA	2013	Various CA	51.0%	14	3,860,421	100%	707,217	90,566	616,651	91,769
West Coast Industrial Portfolio - WA	2013	Various WA	51.0%	3	1,422,353	100%	135,252	21,634	113,618	44,563
New Jersey Industrial Portfolio	2015	Various NJ	100.0%	3	1,531,596	100%	402,800	-	402,800	97,785
Westgate Building	2016	San Bernardino, CA	100.0%	1	414,020	100%	134,000	-	134,000	36,030
Dallas Industrial Portfolio	2016 & 2019	Various TX	100.0%	11	3,459,578	100%	415,550	85,133	330,417	194,130
Perris Circle	2017	Perris, CA	100.0%	1	474,235	100%	131,000	-	131,000	52,275
Rickenbacker	2019	Columbus, OH	100.0%	1	972,160	100%	97,200	-	97,200	67,055
Gillem 900	2020	Forest Park, GA	100.0%	1	1,043,418	100%	115,000	-	115,000	86,092
Agua Mansa	2021	Colton, CA	100.0%	3	813,513	91%	243,000	-	243,000	125,082
Logistics Center Phoenix	2021	Glendale, AZ	100.0%	1	915,160	100%	105,000	-	105,000	68,298
Stockton Industrial	2021	Stockton, CA	95.5%	3	-	N/A	73,705	-	73,705	67,623
Columbus Point Portfolio	2022	Columbus, OH	100.0%	4	-	N/A	99,374	-	99,374	99,778
Total - Industrial				**58**	**19,512,722**	**99%**	**3,177,798**	**292,329**	**2,885,469**	**1,250,843**
Office										
Alhambra Medical Office Building	2011	Sacramento, CA	100.0%	1	103,652	88%	57,700	-	57,700	48,413
Foundry Square IV	2012	San Francisco, CA	100.0%	1	239,798	98%	284,000	-	284,000	207,664
353 North Clark	2014	Chicago, IL	75.0%	1	1,184,258	89%	447,810	208,011	239,799	359,842
First Hill Medical Pavilion	2016	Seattle, WA	100.0%	1	230,563	78%	197,900	-	197,900	194,925
Healthcare Portfolio	2018	Various US	100.0%	10	962,626	94%	451,100	-	451,100	433,191
28 State Street	2018	Boston, MA	100.0%	1	573,584	87%	401,000	175,840	225,160	264,389
Campus at Playa Vista	2018	Los Angeles, CA	100.0%	1	338,069	77%	262,000	-	262,000	340,757
Total - Office				**16**	**3,632,550**	**89%**	**2,101,510**	**383,851**	**1,717,659**	**1,849,181**
Retail										
Chandler Fashion Center	2009	Chandler, AZ	10.1%	1	635,788	94%	48,497	25,286	23,211	12,349
Freehold Raceway Mall	2009	Freehold, NJ	10.1%	1	876,913	92%	35,894	35,894	-	1,379
Pinnacle at Turkey Creek	2011	Knoxville, TN	100.0%	1	657,175	93%	157,500	-	157,500	153,772
Miracle Marketplace	2013	Miami, FL	100.0%	1	242,485	98%	69,300	-	69,300	100,309
Pacific Commons	2013 & 2014	Fremont, CA	100.0%	1	994,387	93%	295,800	135,154	160,646	153,855
Shops at Wailea	2015	Wailea, HI	100.0%	1	179,594	96%	328,000	126,712	201,288	229,168
Deptford Mall	2016	Deptford, NJ	49.0%	1	505,860	96%	126,420	78,263	48,157	185,397
Twenty Ninth Street	2016	Boulder, CO	49.0%	1	692,458	96%	128,870	70,393	58,477	109,208
FlatIron Crossing[6]	2016	Broomfield, CO	49.0%	1	1,041,332	77%	178,654	84,972	93,682	281,774
Broadway Plaza	2018	Walnut Creek, CA	50.0%	1	762,887	99%	356,650	203,540	153,110	214,798
Total - Retail				**10**	**6,588,879**	**92%**	**1,725,585**	**760,214**	**965,371**	**1,442,009**
Total - Retail Excluding Vacant Anchor[7]					**6,423,879**	**94%**				
Self-Storage										
Life Storage I Portfolio	Various	Various US	75.3%	37	24,263 units	90%	712,397	135,339	577,058	299,389
Life Storage II Portfolio	2011 & 2012	NJ, PA, & TX	70.7%	22	15,358 units	92%	352,941	72,337	280,604	44,661
Life Storage III Portfolio	2022 & 2023	Various US	40.0%	16	10,858 units	71%	108,608	-	108,608	114,833
Storage Post I Portfolio	2012 & 2013	NJ & NY	96.6%	14	18,316 units	94%	490,245	144,756	345,489	162,971
Metro Portfolio	2013 & 2014	Various US	77.4%	20	11,876 units	84%	267,128	57,857	209,271	55,605
CubeSmart I Portfolio	2013	NC & TX	50.0%	28	14,351 units	92%	199,420	49,493	149,927	84,383
Storage Post II Portfolio	2015	Various NY	95.7%	2	3,863 units	91%	155,563	47,788	107,775	77,062
CubeSmart II Portfolio	2016	Various US	68.1%	13	5,875 units	89%	130,797	28,478	102,319	32,387
iStorage Portfolio	2018 & 2020	Various US	34.0%	104	65,974 units	89%	604,846	213,701	391,145	223,007
Total - Self-Storage				**256**	**170,734 units**	**89%**	**3,021,945**	**749,749**	**2,272,196**	**1,094,298**
TOTAL PORTFOLIO				**358**		**95%**	**$ 12,944,320**	**$ 2,637,029**	**$ 10,307,291**	**$ 7,619,046**

1. Fund share based on effective Fund ownership percentage. Ownership percentage is net of the joint venture partner's promote, if applicable.
2. 100% of the property value, including joint venture partner's share, if applicable.
3. Weighting based on Fund ownership share.
4. Amount reflects the fair value of the third party loan secured by the property and excludes borrowings under the Fund's credit facility.
5. Net investment (net cost of real estate assets), plus capital additions and principal payments on debt.
6. Leasing level is inclusive of vacant anchor store at FlatIron Crossing, where the anchor box was acquired on 5/14/2021. Leasing level excluding vacant anchor store for FlatIron Crossing is 92%.
7. FlatIron Crossing vacant anchor box excluded.

Portfolio Summary

FUND'S VALUE-ADDED STRATEGY

The Fund's current value-added strategy portfolio represents 1.3% of the total gross real estate value of the Fund as of Q1 2023 and is expected to grow to an estimated 1.9% when the development and lease-up costs of the Fund's two industrial development projects are fully invested. The Fund is currently executing two build-to-core activities, Stockton Industrial and Columbus Point, which total 1.1 msf and 1.2 msf, respectively, with the potential for an additional 2.9 msf of future development at Columbus Point. Substantial completion for the Columbus Point and Stockton Industrial developments is projected for Q2 2023 and Q4 2023, respectively. During Q1 2023, the Fund successfully delivered the Logistics Center Phoenix development and executed a lease with a logistics tenant, achieving a 100% leasing level, which served to move the project from a value-add to a core designation. The table below summarizes the capacity for, and the current and prospective assets in, the Fund's value-added strategy:

VALUE-ADDED STRATEGY SUMMARY

Investment Name	Location	Property Type	Strategy	Gross Value at Fund's Share (000's)	Projected Total Investment at Fund's Share (000's)	Percent Complete (%)
Stockton Industrial	Stockton, CA (Bay Area Metro)	Industrial	Build-to-core	73,705	114,032	59.1%
Columbus Point Portfolio	Columbus, OH (Columbus Metro)	Industrial	Build-to-core	99,374	92,134	71.5%
Total				**$ 173,079**	**$ 206,166**	**64.6%[1]**

1. Represents the weighted average percent complete based on each investment's total gross investment.



Columbus Point — Columbus, OH



Stockton Industrial — Stockton, CA

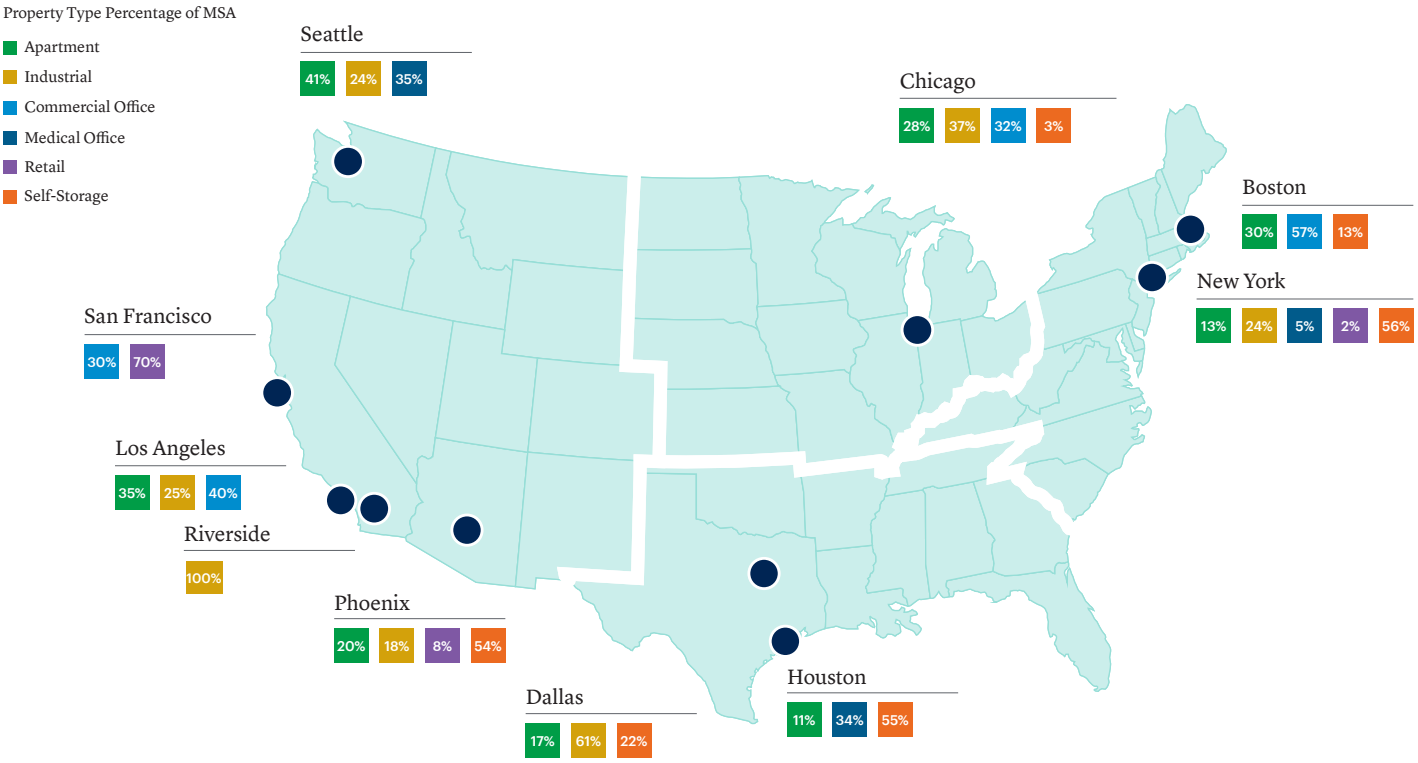
There can be no assurance that the Fund will be able to effectively implement its capital expenditures plan or investment strategy, achieve its investment or asset allocation objectives or avoid substantial losses.

Past performance is not necessarily indicative of future results. There can be no assurance that the Fund will be able to acquire similar properties in the future or that future acquisitions will be on similar terms.

Portfolio Summary

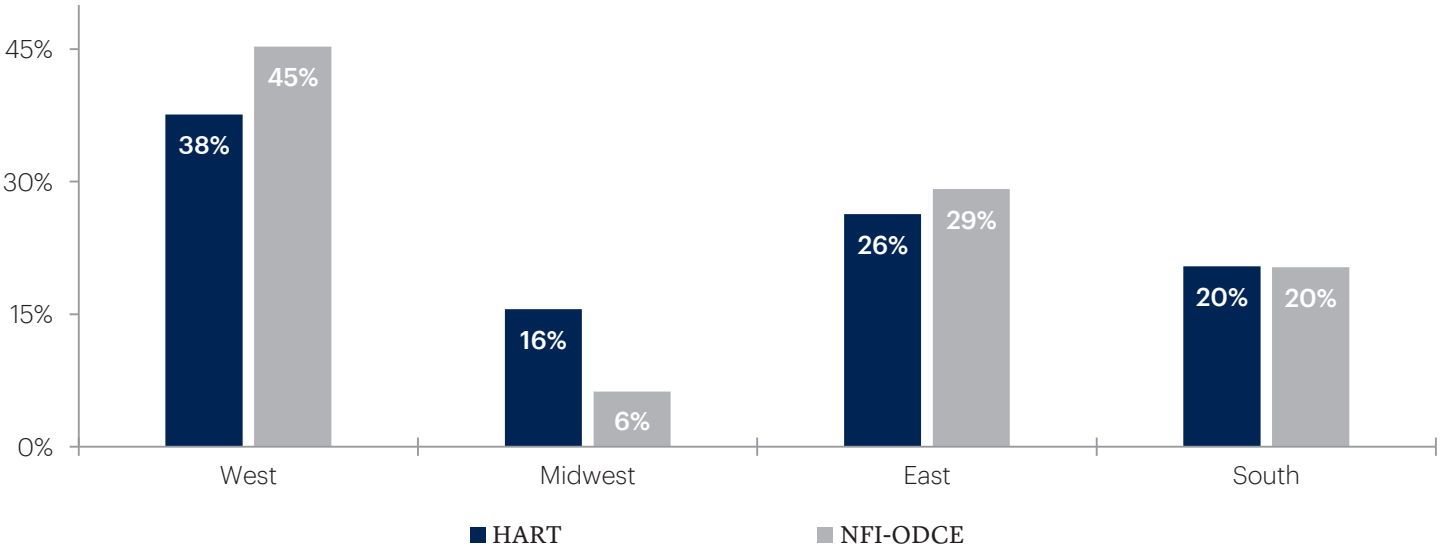
TOP TEN MSAs AS OF MARCH 31, 2023

BASED ON FUND SHARE OF GROSS VALUE



GEOGRAPHIC DIVERSIFICATION AS OF MARCH 31, 2023

BASED ON FUND GROSS VALUE



Portfolio Summary

PROPERTY LEASING PROFILE

Logistics Center Phoenix[37]

GLENDALE, AZ

In March 2021, the Fund acquired the Logistics Center Phoenix (the "Property") industrial development land site located in the Southwest Valley submarket of Phoenix. Phoenix has become a major logistics hub with many corporations relocating to, or expanding operations in, the market due to its large and growing population, deep labor pool, low operating cost environment, and infrastructure. The Property is located along Loop 303, five miles north of the Interstate-10 interchange, providing convenient access to the broader Phoenix metro as well as surrounding logistics hubs, namely Southern California. The Property's location provides access to 1.7 million people within a 30-minute drive and major cities, such as Los Angeles, San Diego, Tucson, El Paso, and Albuquerque, all within a one-day's drive. The Property development plan consisted of one bulk warehouse totaling approximately 914,000 sf with Pizzuti Companies providing development management services. The Property commenced vertical construction in Q3 2021, and substantial completion was achieved in Q3 2022. The Project features include a cross dock configuration, 40-foot ceiling clear height, early suppression/fast response sprinklers, and ample trailer storage. A full-building lease was executed in Q1 2023 with a wholly owned affiliate of UNIS for a seven-year term, commencing in April 2023. UNIS provides third-party logistics services for over 1,200 corporate clients across the United States with a current footprint of over 12 msf of industrial space. The UNIS rental rate is 20% above the original pro forma underwritten rent for the development.

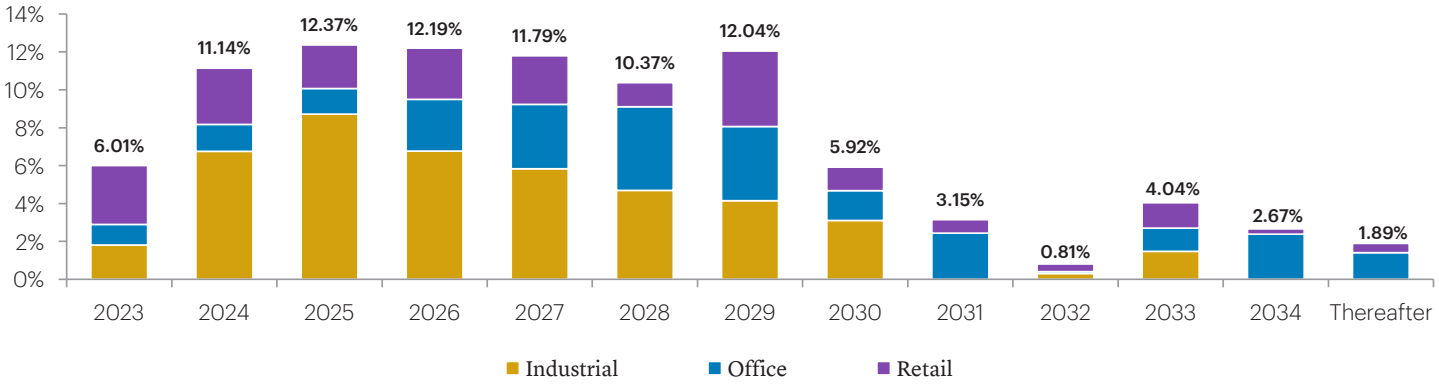




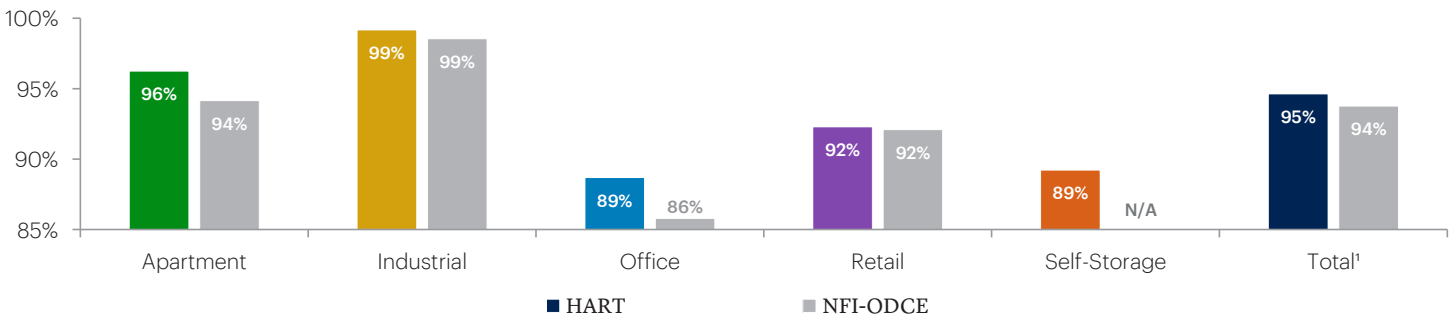
37. The property leasing profile reflects what Heitman believes to be the most notable leasing activity occurring in the Fund in Q1 2023. Past performance is not necessarily indicative of future results, and there can be no assurance that the Fund will achieve comparable results in the future.

LEASE EXPIRATION SCHEDULE AS OF MARCH 31, 2023

BASED ON FUND COMMERCIAL GROSS ASSET VALUE



CURRENT LEASING COMPARISON



1. Fund leasing level excluding self-storage properties averages 97%.

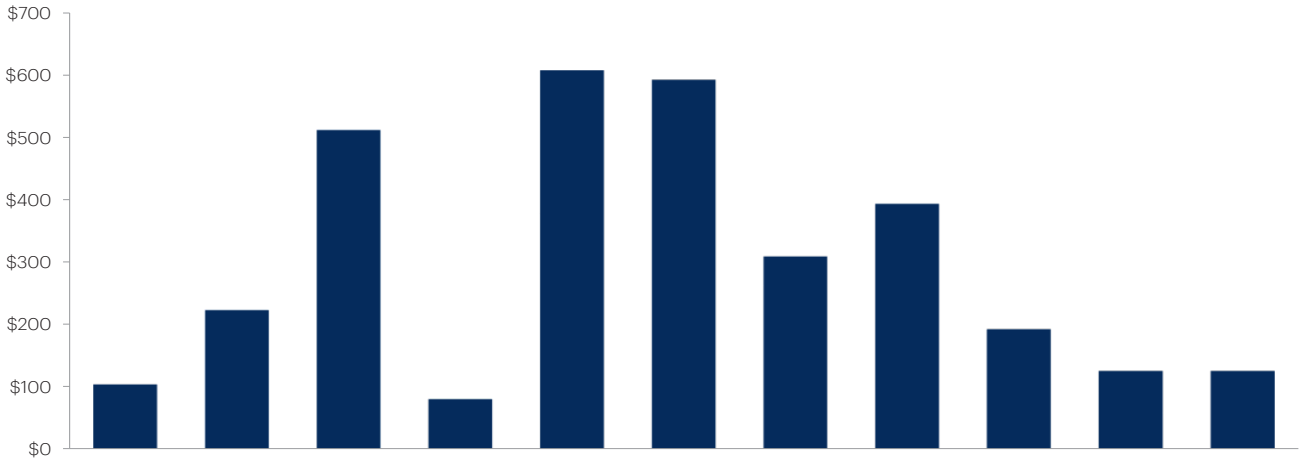
Portfolio Summary

DEBT OVERVIEW[1]

Total Leverage Ratio[2] [3]	23.6%
NFI-ODCE Leverage Ratio	23.8%
Fixed Rate Debt[4]	97%
Weighted Average Maturity of Debt[4]	4.9 years
Trailing One Year Debt Service Coverage Ratio[5]	3.89
Weighted Average Interest Rate[6]	3.97%

LOAN MATURITIES BY YEAR[7]

$ IN MILLIONS



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Thereafter
Loan Value	$103.3	$222.5	$511.7	$79.7	$607.2	$592.2	$308.7	$393.2	$192.0	$125.0	$125.0
Percentage of Outstanding Loans	3.2%	6.8%	15.7%	2.4%	18.6%	18.2%	9.5%	12.1%	5.9%	3.8%	3.8%
Weighted Average Interest Rate	3.93%	3.71%	3.51%	4.10%	4.31%	3.97%	3.59%	3.82%	4.33%	3.24%	3.34%

1. There can be no assurance that the Fund will be able to effectively implement its debt management plan or investment strategy, achieve its investment or asset allocation objectives or avoid substantial losses.
2. Total leverage (including the Credit Facility) at fair market value over total assets. Total leverage (including the Credit Facility) at cost over total assets at cost is 30.6%.
3. Total leverage (excluding the Credit Facility) at fair market value over total assets is 23.5%.
4. Excludes the Credit Facility outstanding balance of $15 million as of March 31, 2023.
5. Trailing one year debt service coverage ratio is 3.05 for Fund encumbered assets.
6. Weighted by Fund's share of leverage (excluding the Credit Facility) at cost. Weighted average interest rate including the Credit Facility is 3.98%.
7. Fund's share of total debt excluding the Credit Facility.

Portfolio Summary

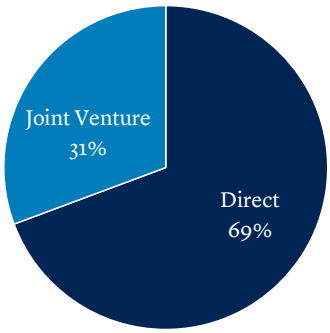
TIER 1 (T1) TOTAL LEVERAGE RECONCILIATION[3]

	Total Assets per Condensed Combined Financial Statements	$	14,092,609,723
+	Fund's Economic Share of Non-Consolidated Liabilities		1,418,302,477
-	Joint Venture Partner's Economic Share of Total Assets		(2,268,205,937)
=	**Fund's Economic Share of Total Assets**	**$**	**13,242,706,263**
	Fund's Total Debt at Cost[1]	$	3,267,599,195
÷	Fund's Economic Share of Assets		13,242,706,263
=	**T1 Leverage Level[2]**		**24.7%**

1. Includes Fund Level Debt, $515 million outstanding as of March 31, 2023.
2. T1 Leverage Level is calculated in accordance and as defined by the NCREIF/PREA reporting standards.
3. There can be no assurance that the Fund will be able to effectively implement its debt management plan or investment strategy, achieve its investment or asset allocation objectives or avoid substantial losses.

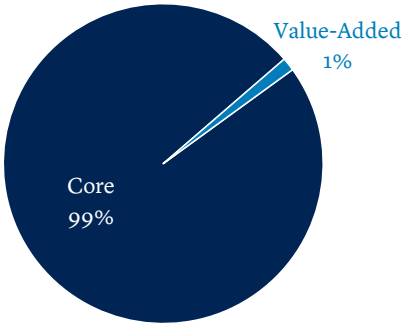
FUND STRUCTURE

BASED ON FUND GROSS VALUE



INVESTMENT STRATEGY

BASED ON FUND GROSS VALUE



TOTAL GLOBAL EXPENSE RATIO[1]

FOR THE ROLLING FOUR QUARTER PERIODS ENDING MARCH 31, 2023 AND 2022

		2023		2022
Asset/Fund management fees[2]	$	77,055,971	$	74,356,897
Transaction-based management fees[3]		1,065,000		-
Total Fees Earned by Investment Advisor	**$**	**78,120,971**	**$**	**74,356,897**
Total Vehicle-related costs charged by third parties[4]	**$**	**7,623,719**	**$**	**6,304,297**
Average Gross Asset Value[5]	**$**	**13,916,967,048**	**$**	**13,064,059,412**
Gross Asset Value TGER		**0.62%**		**0.62%**
Weighted Average Net Asset Value[6]	**$**	**10,616,746,009**	**$**	**9,304,513,199**
Net Asset Value TGER		**0.81%**		**0.87%**

1. There can be no assurance that the fees and costs reflected in the above table will not be significantly greater in the future. Increases in such fees and costs may negatively impact the returns to limited partners.
2. Includes regularly recurring asset management fees earned by the General Partner for the ongoing management of the Fund. These fees are paid on a quarterly basis and are not included in the Fund's condensed combined financial statements as the asset management service arrangements are directly between the limited partners and the General Partner.
3. Includes debt arrangement fees paid to the General Partner for each financing that the General Partner arranges on behalf of the Fund.
4. Includes vehicle costs paid to third parties to maintain and grow the Fund's operations. These costs include audit costs, bank charges, custodian costs and depository costs, other/misc. vehicle administration costs, professional services costs, dead deal costs, legal costs, and appraisal/valuation costs.
5. Gross asset value is the average of the quarterly assets as of March 31, 2022 through March 31, 2023 and March 31, 2021 through March 31, 2022, respectively. Assets are calculated as follows: Total Balance Sheet assets less Joint Venture partner's economic share of total assets plus Fund's economic share of non-consolidated liabilities.
6. Net asset value is the average of the quarterly weighted net assets as of March 31, 2022 through March 31, 2023 and March 31, 2021 through March 31, 2022, respectively.

Environmental Performance

The Fund is committed to investment in energy efficiency projects that reduce carbon emissions, achieve savings in operational expenses, and enhance long-term asset value.

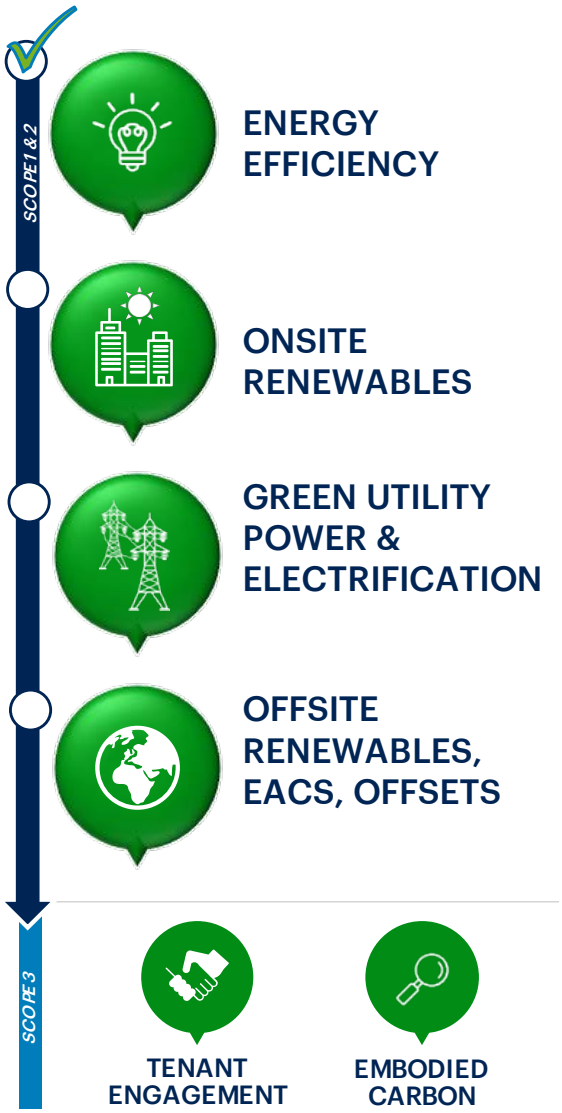
In 2022, assets within HART completed 72 energy efficiency projects with a total estimated annual savings of $1.3 million, a cost of $4.6 million and an average payback period of 3.5 years. Key projects include building automation system upgrades/replacements, building envelope upgrades, installation of high-efficiency equipment, and retro-commissioning. Investing in energy efficiency projects is crucial for decarbonizing real estate assets and reducing their carbon footprint. These projects not only improve the energy performance of buildings but also enhance their value and operational efficiency, thereby reducing operational expenses associated with energy usage.

72
Projects[1]

3.5yrs
Payback

$4.6mm
Cost

$1.3mm
Annual Savings[2]





Foundry Square IV — San Francisco, CA

1. A total of 72 projects covering 111 investments.

2. Calculation of annual savings is dependent on assumptions applied to certain material factors. There can be no assurance the assumptions used to calculate the annual savings will be correct or achievable.

The Fund considers ESG factors in the total mix of data used to make investment decisions. In addition to ESG factors the Fund will weigh other considerations with equal and in some cases preferred prominence.



Property Transactions

Premiere on Pine – Seattle, WA

First Quarter 2023 Acquisitions

LIFE STORAGE III PORTFOLIO ADD-ON
FREEHOLD, NJ



Property Type	Self-Storage
Closing Date	February 28, 2023
Gross Purchase Price (Fund's Share)	$9.0 million
Fund's Share	40.0%
Leverage at Acquisition	0.0%
Total Square Feet/Units	70,360 sqft
Leasing Level at Acquisition	0%

The investment is consistent with the Fund's self-storage investment strategy of maintaining a dedicated allocation to the sector and aggregation of self-storage portfolios in joint venture with strong operating partners with evidenced expertise in this sector. This acquisition represents an add-on to the existing institutional-quality Life Storage III portfolio which features a mix of highly desirable attributes and provides access and exposure to an array of self-storage markets with low competition and saturation levels.



Financial Statements & Notes

28 State Street – Boston, MA

Condensed Combined Financial Statements

HEITMAN AMERICA REAL ESTATE TRUST

CONDENSED COMBINED STATEMENTS OF NET ASSETS
AS OF MARCH 31, 2023 AND DECEMBER 31, 2022
UNAUDITED

	2023	2022
ASSETS		
REAL ESTATE INVESTMENTS AT ESTIMATED FAIR VALUE:		
Real estate and improvements		
(Cost: 2023 - $8,402,466,647; 2022 - $8,375,361,546)	$ 11,296,613,904	$ 11,729,882,157
Non-consolidated real estate corporations and ventures		
(Cost: 2023 - $1,902,983,994; 2022 - $1,881,915,934)	2,462,396,225	2,499,907,592
Total real estate investments	13,759,010,129	14,229,789,749
CASH AND CASH EQUIVALENTS	211,411,427	237,305,324
RESTRICTED CASH	17,081,150	21,169,685
ACCOUNTS RECEIVABLE		
(net of allowance for doubtful accounts: 2023 - $2,755,074; 2022 - $2,907,557)	28,214,354	23,352,050
OTHER ASSETS	76,892,663	75,108,122
Total assets	**14,092,609,723**	**14,586,724,930**
LIABILITIES		
MORTGAGE NOTES PAYABLE AT ESTIMATED FAIR VALUE		
(Cost: 2023 - $1,993,405,305; 2022 - $1,993,959,846)	1,916,886,993	1,917,069,488
CREDIT FACILITY AT ESTIMATED FAIR VALUE		
(Cost: 2023 - $15,000,000; 2022 - $0)	15,000,000	-
PRIVATE PLACEMENT DEBT PAYABLE AT ESTIMATED FAIR VALUE		
(Cost: 2023 - $500,000,000; 2022 - $500,000,000)	468,212,778	468,412,526
REAL ESTATE TAXES PAYABLE	38,684,661	47,169,166
DISTRIBUTIONS PAYABLE	83,700,000	91,500,000
OTHER LIABILITIES	164,896,671	177,535,951
Total liabilities	**2,687,381,103**	**2,701,687,131**
TOTAL NET ASSETS	**$ 11,405,228,620**	**$ 11,885,037,799**
NET ASSETS ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	1,540,540,661	1,591,211,763
NET ASSETS ATTRIBUTABLE TO HEITMAN AMERICA REAL ESTATE TRUST	**$ 9,864,687,959**	**$ 10,293,826,036**
SHARES OUTSTANDING ATTRIBUTABLE TO HEITMAN AMERICA REAL ESTATE TRUST	6,889,056.3937	6,875,710.8082
NET ASSET VALUE PER SHARE ATTRIBUTABLE TO HEITMAN AMERICA REAL ESTATE TRUST	**$ 1,431.9360**	**$ 1,497.1290**

See notes to condensed combined financial statements.

Condensed Combined Financial Statements

HEITMAN AMERICA REAL ESTATE TRUST

CONDENSED COMBINED STATEMENTS OF REAL ESTATE INVESTMENTS AS OF MARCH 31, 2023 AND DECEMBER 31, 2022

UNAUDITED

	Total Owned Square Feet/ Units[1]	Form of Ownership Interest	Location	2023 Cost	2023 Fair Value	2022 Cost	2022 Fair Value
Real estate and improvements							
Apartments:							
15 Bank	501 units	Direct	White Plains, NY	$ 178,779,689	$ 217,000,000	$ 178,697,731	$ 234,000,000
Villas at River Oaks	288 units	Direct	Houston, TX	49,893,933	62,600,000	49,666,889	64,300,000
AO Santa Monica	350 units	Direct	Santa Monica, CA	186,544,308	225,000,000	186,391,525	243,000,000
Commons Park West	340 units	Direct	Denver, CO	121,238,365	164,200,000	120,977,442	179,100,000
1225 Old Town	250 units	Direct	Chicago, IL	166,073,678	156,000,000	165,997,046	155,000,000
Folio	606 units	Direct	Austin, TX	97,032,642	162,000,000	96,802,690	164,000,000
Biltmore at Camelback	270 units	Direct	Phoenix, AZ	78,068,924	121,000,000	77,947,434	128,000,000
OneEleven	504 units	Co-Investment	Chicago, IL	350,491,012	319,000,000	350,240,617	348,000,000
The Taylor	308 units	Direct	Dallas, TX	120,367,043	117,000,000	120,079,186	117,000,000
Premiere on Pine	386 units	Direct	Seattle, WA	248,055,238	226,000,000	247,941,859	238,000,000
The Porter Del Ray	276 units	Direct	Alexandria, VA	103,782,812	130,000,000	103,633,632	131,000,000
Cambridge Park	312 units	Direct	Cambridge, MA	182,052,513	212,000,000	181,812,227	227,000,000
Avalia Boca Raton	297 units	Direct	Boca Raton, FL	127,935,768	194,000,000	127,777,896	203,000,000
Square on Fifth	230 units	Direct	Atlanta, GA	142,875,119	162,000,000	142,855,906	159,000,000
Radius at 15th	200 units	Direct	Minneapolis, MN	77,335,448	96,000,000	77,322,030	103,400,000
The Sawyer Providence Farm	404 units	Direct	Charlotte, NC	99,020,507	155,000,000	98,881,250	163,000,000
Halo 46	158 units	Direct	Tampa, FL	51,825,478	65,400,000	51,780,492	65,400,000
The Ashborough	504 units	Direct	Ashburn, VA	161,323,433	213,000,000	161,073,920	213,900,000
Total - Apartments (Fair Value is 30% of NAV)	**6,184 units**			**2,542,695,910**	**2,997,200,000**	**2,539,879,772**	**3,136,100,000**
Industrial:							
Chicago Industrial Portfolio	4,606,268	Direct	Various IL	320,731,107	518,700,000	320,248,773	515,400,000
West Coast Industrial Portfolio-CA	3,860,421	Co-Investment	Various CA	357,909,849	1,386,700,000	357,162,111	1,428,100,000
West Coast Industrial Portfolio-WA	1,422,353	Co-Investment	Various WA	129,797,965	265,200,000	129,617,558	269,100,000
New Jersey Industrial Portfolio	1,531,596	Direct	Various NJ	97,918,415	402,800,000	97,918,415	420,900,000
Westgate Building	414,020	Direct	San Bernardino, CA	36,083,907	134,000,000	36,083,907	139,000,000
Dallas Industrial Portfolio	3,459,578	Direct	Various TX	284,202,036	415,550,000	283,343,079	426,250,000
Perris Circle	474,235	Direct	Perris, CA	52,277,074	131,000,000	52,277,074	136,000,000
Rickenbacker	972,160	Direct	Columbus, OH	67,060,652	97,200,000	67,060,652	102,700,000
Gillem 900	1,043,418	Direct	Atlanta, GA	86,101,818	115,000,000	86,098,106	122,000,000
Agua Mansa Portfolio	813,513	Direct	Colton, CA	125,096,369	243,000,000	125,096,369	249,600,000
Logistics Center Phoenix	915,160	Direct	Glendale, AZ	68,297,592	105,000,000	62,180,626	104,100,000
Stockton Industrial Portfolio[2]	-	Joint Venture	Stockton, CA	70,946,805	77,200,000	67,526,050	70,400,001
Columbus Point Portfolio[2]	-	Direct	Columbus, OH	99,778,217	99,373,904	95,856,469	95,452,156
Total - Industrial (Fair Value is 40% of NAV)	**19,512,722**			**1,796,201,806**	**3,990,723,904**	**1,780,469,189**	**4,079,002,157**
Office:							
Alhambra Medical Office Building	103,652	Direct	Sacramento, CA	48,766,359	57,700,000	48,591,689	59,900,000
Foundry Square IV	239,798	Direct	San Francisco, CA	207,799,787	284,000,000	207,799,787	305,000,000
353 North Clark	1,184,258	Co-Investment	Chicago, IL	765,874,648	597,000,000	761,885,496	645,000,000
First Hill Medical Pavilion	230,563	Direct	Seattle, WA	194,972,387	197,900,000	197,124,760	206,900,000
Healthcare Portfolio	962,626	Direct	Various US	433,389,821	451,100,000	433,047,003	466,300,000
28 State Street	573,584	Direct	Boston, MA	456,408,054	401,000,000	453,430,635	439,000,000
Campus at Playa Vista	338,069	Direct	Los Angeles, CA	341,141,226	262,000,000	341,141,226	275,000,000
Total - Office (Fair Value is 23% of NAV)	**3,632,550**			**2,448,352,282**	**2,250,700,000**	**2,443,020,596**	**2,397,100,000**
Retail:							
Pinnacle at Turkey Creek	657,175	Direct	Knoxville, TN	153,806,114	157,500,000	152,970,640	161,500,000
Miracle Marketplace	242,485	Direct	Miami, FL	100,399,621	69,300,000	99,773,599	72,900,000
Pacific Commons	994,387	Direct	Fremont, CA	299,193,053	295,800,000	298,840,027	307,500,000
Shops at Wailea	179,594	Direct	Wailea, HI	366,403,186	328,000,000	365,695,830	326,000,000
Total - Retail (Fair Value is 9% of NAV)	**2,073,641**			**919,801,974**	**850,600,000**	**917,280,096**	**867,900,000**
Self-Storage:							
Storage Post I Portfolio	18,316 units	Joint Venture	NJ & NY	325,449,628	507,500,000	324,924,488	530,100,000
Metro Portfolio	11,876 units	Joint Venture	Various US	147,113,582	345,100,000	147,068,158	353,500,000
Storage Post II Portfolio	3,863 units	Joint Venture	Various NY	130,571,915	162,600,000	130,525,132	166,200,000
CubeSmart II Portfolio	5,875 units	Joint Venture	Various US	92,279,550	192,190,000	92,194,115	199,980,000
Total - Self Storage (Fair Value is 12% of NAV)	**39,930 units**			**695,414,675**	**1,207,390,000**	**694,711,893**	**1,249,780,000**
Total real estate and improvements				**$ 8,402,466,647**	**$ 11,296,613,904**	**$ 8,375,361,546**	**$ 11,729,882,157**
Non-consolidated real estate corporations and ventures							
Retail:							
Freehold Chandler Holdings LP	1,512,701	Joint Venture	AZ & NJ	$ 4,134,413	$ 83,289,097	$ 3,775,744	$ 85,916,582
Macerich HHF Centers LLC	2,239,650	Joint Venture	CO & NJ	580,968,456	203,077,810	579,123,766	204,358,901
Macerich HHF Broadway Plaza LLC	762,887	Joint Venture	Walnut Creek, CA	221,701,016	159,576,636	218,273,209	170,950,789
Total - Retail (Fair Value is 5% of NAV)	**4,515,238**			**806,803,885**	**445,943,543**	**801,172,719**	**461,226,272**
Self-Storage:							
Life Storage I Portfolio (f/k/a Sovran I Portfolio)	24,263 units	Joint Venture	Various US	270,223,597	581,157,432	270,581,141	598,562,448
Life Storage II Portfolio (f/k/a Sovran II Portfolio)	15,358 units	Joint Venture	NJ, PA, & TX	15,353,382	282,512,493	16,179,582	296,410,819
Life Storage HHF Wasatch Holdings, LLC[3]	10,858 units	Co-Investment	Various US	230,230,145	217,658,381	213,959,728	212,119,861
CubeSmart I Portfolio	14,351 units	Joint Venture	NC & TX	84,198,043	149,681,139	84,315,142	148,574,010
NSA HHF JV, LLC	65,974 units	Co-Investment	Various US	496,174,942	785,443,237	495,707,622	783,014,182
Total - Self Storage (Fair Value is 20% of NAV)	**130,804 units**			**1,096,180,109**	**2,016,452,682**	**1,080,743,215**	**2,038,681,320**
Total non-consolidated real estate corporations and ventures				**$ 1,902,983,994**	**$ 2,462,396,225**	**$ 1,881,915,934**	**$ 2,499,907,592**

1. 100%, including Joint Venture partner share, if applicable.
2. No owned square feet due to currently being under development.
3. Includes acquisition of one additional building on February 28, 2023.

See notes to condensed combined financial statements.

Condensed Combined Financial Statements

HEITMAN AMERICA REAL ESTATE TRUST

CONDENSED COMBINED STATEMENTS OF OPERATIONS
FOR THE THREE MONTHS ENDED MARCH 31, 2023 AND THE YEAR ENDED DECEMBER 31, 2022
UNAUDITED

	2023	2022
INVESTMENT INCOME:		
Revenues from real estate and improvements	$ 167,815,680	$ 675,785,228
Equity income from non-consolidated real estate corporations and ventures	29,791,853	127,557,599
Interest income	1,856,385	2,946,846
Total investment income	**199,463,918**	**806,289,673**
EXPENSES:		
Real estate operating expenses	35,144,460	141,351,912
Real estate taxes	29,393,105	116,340,806
Interest expense	24,342,465	88,635,952
Financing costs	1,581,751	8,480,631
General and administrative expenses	3,796,563	14,311,679
Total expenses	**94,258,344**	**369,120,980**
NET INVESTMENT INCOME	**105,205,574**	**437,168,693**
REALIZED AND UNREALIZED GAIN (LOSS) ON REAL ESTATE INVESTMENTS:		
Net proceeds from real estate and improvements sold	-	805,133,357
Less cost of real estate and improvements sold	-	(701,401,942)
Realization of previously recorded unrealized gain on real estate improvements sold	-	(110,918,308)
Realization of previously recorded unrealized loss on mortgage notes payable	(310,459)	(292,876)
Equity in realized loss on disposed non-consolidated real estate corporations and ventures	-	(2,090,765)
Realization of previously recorded unrealized loss on disposed non-consolidated real estate corporations and ventures	-	3,227,588
Net realized and unrealized loss	**(310,459)**	**(6,342,946)**
Unrealized gain (loss) on real estate and improvements	(460,373,354)	626,517,660
Unrealized gain (loss) on investments in non-consolidated real estate corporations and ventures	(58,579,427)	172,894,709
Unrealized gain on derivative financial instrument	795,790	2,209,118
Unrealized gain (loss) on mortgage notes payable	(61,587)	83,461,312
Unrealized gain on private placement debt payable	199,748	36,644,632
Net unrealized gain (loss)	**(518,018,830)**	**921,727,431**
NET REALIZED AND UNREALIZED GAIN (LOSS)	**(518,329,289)**	**915,384,485**
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	**$ (413,123,715)**	**$ 1,352,553,178**
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	(47,705,575)	273,134,370
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS ATTRIBUTABLE TO HEITMAN AMERICA REAL ESTATE TRUST	**$ (365,418,140)**	**$ 1,079,418,808**

See notes to condensed combined financial statements.

Condensed Combined Financial Statements

HEITMAN AMERICA REAL ESTATE TRUST

CONDENSED COMBINED STATEMENTS OF CHANGES IN NET ASSETS
FOR THE THREE MONTHS ENDED MARCH 31, 2023 AND THE YEAR ENDED DECEMBER 31, 2022
UNAUDITED

	Heitman America Real Estate Trust		Non-controlling Interests	Total
	Shares	Amount		
NET ASSETS, JANUARY 1, 2022	**7,410,881.1767**	**$ 10,373,725,136**	**$ 1,254,066,273**	**$ 11,627,791,409**
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM:				
OPERATIONS:				
Net investment income		386,981,690	50,187,003	437,168,693
Net realized and unrealized gain		692,437,118	222,947,367	915,384,485
CAPITAL TRANSACTIONS:				
Contributions	153,727.7277	231,125,000	109,452,488	340,577,488
DRIP contributions	65,593.8515	99,457,092	-	99,457,092
Redemptions	(754,491.9477)	(1,125,000,000)	-	(1,125,000,000)
Distributions		(364,900,000)	(45,441,368)	(410,341,368)
NET ASSETS, DECEMBER 31, 2022	**6,875,710.8082**	**10,293,826,036**	**1,591,211,763**	**11,885,037,799**
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM:				
OPERATIONS:				
Net investment income		92,105,917	13,099,657	105,205,574
Net realized and unrealized loss		(457,524,057)	(60,805,232)	(518,329,289)
CAPITAL TRANSACTIONS:				
Contributions	-	-	9,022,026	9,022,026
DRIP contributions	13,345.5855	19,980,063	-	19,980,063
Distributions		(83,700,000)	(11,987,553)	(95,687,553)
NET ASSETS, MARCH 31, 2023	**6,889,056.3937**	**$ 9,864,687,959**	**$ 1,540,540,661**	**$ 11,405,228,620**

See notes to condensed combined financial statements.

Condensed Combined Financial Statements

HEITMAN AMERICA REAL ESTATE TRUST

CONDENSED COMBINED STATEMENTS OF CASH FLOWS
FOR THE THREE MONTHS ENDED MARCH 31, 2023 AND THE YEAR ENDED DECEMBER 31, 2022
UNAUDITED

	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net increase (decrease) in net assets resulting from operations	**$ (413,123,715)**	**$ 1,352,553,178**
Adjustments to reconcile net change in net assets resulting from operations to net cash flows from operating activities:		
Net realized and unrealized (gain) loss	518,329,289	(915,384,485)
Equity income from non-consolidated real estate corporations and ventures	(29,791,853)	(127,557,599)
Contributions to non-consolidated real estate corporations and ventures	(19,610,011)	(266,615,109)
Distributions from non-consolidated real estate corporations and ventures	28,333,804	107,492,752
Purchases of real estate and improvements	(36,204,407)	(200,911,207)
Acquisitions of real estate and improvements	-	(39,035,880)
Proceeds from sale of real estate and improvements	-	805,133,357
Financing costs	1,581,751	8,480,631
Changes in:		
Accounts receivable	(4,862,304)	6,379,001
Other assets	(5,784,541)	196,502
Real estate taxes payable	(8,484,505)	1,589,920
Other liabilities	1,255,816	9,395,322
Net cash flows from operating activities	**31,639,324**	**741,716,383**
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from the credit facility	35,000,000	135,000,000
Payments on the credit facility	(20,000,000)	(135,000,000)
Proceeds from mortgage notes payable	220,000,000	200,000,000
Principal payments on mortgage notes payable	(554,541)	(2,112,797)
Payoff on mortgage notes payable	(220,000,000)	(243,702,684)
Payment of financing costs	(1,581,751)	(8,480,631)
Proceeds from private placement debt payable	-	250,000,000
Limited partner capital contributions	-	231,125,000
Limited partner redemptions	-	(1,125,000,000)
Capital contributions from non-controlling interests	9,022,026	109,452,488
Distributions to limited partners, net of reinvestment	(71,519,937)	(273,742,908)
Distributions to non-controlling interests	(11,987,553)	(45,441,368)
Net cash flows from financing activities	**(61,621,756)**	**(907,902,900)**
NET CHANGE IN CASH AND CASH EQUIVALENTS AND RESTRICTED CASH	(29,982,432)	(166,186,517)
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH - Beginning of period	258,475,009	424,661,526
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH - End of period	**$ 228,492,577**	**$ 258,475,009**
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during the period for interest	$ 23,605,428	$ 87,521,809
SUPPLEMENTAL NON-CASH FLOW INFORMATION:		
Recognition of RoU assets and corresponding lease liabilities under ASC 842	$ -	$ 74,600,000

Real estate and improvements at March 31, 2023 and December 31, 2022, includes liabilities of $23,620,024 and $32,719,330, respectively, of accruals for leasing commissions and tenant building improvements.

See notes to condensed combined financial statements.

HEITMAN AMERICA REAL ESTATE TRUST

NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS
FOR THE THREE MONTHS ENDED MARCH 31, 2023 AND THE YEAR ENDED DECEMBER 31, 2022
UNAUDITED

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Heitman America Real Estate Trust (the "Fund") is comprised of Heitman America Real Estate Trust, L.P. ("HARTLP") and Heitman America Real Estate Trust (PF#1), L.P. ("PF#1"). HARTLP is a Delaware Limited Partnership established by an Amended and Restated Agreement of Limited Partnership dated January 4, 2007 and most recently amended on January 22, 2019. On July 12, 2013, the General Partner established an investment vehicle ("Parallel Fund") for investors with special legal, regulatory, tax, or other needs to invest in real estate investments with HARTLP. The Fund's Parallel Fund, PF#1, is a Delaware Limited Partnership established by an Amended and Restated Agreement of Limited Partnership dated July 12, 2013 and most recently amended on October 9, 2014 (together with HARTLP, the "Partnership Agreements").

The general partner of HARTLP and PF#1 is Heitman America Real Estate Trust, LLC (the "General Partner"). The accompanying condensed combined financial statements of HARTLP and PF#1 are under common ownership as well as common management by the General Partner. Operating and organizational expenses incurred by HARTLP and PF#1 are allocated pro rata in proportion to their respective net asset values.

The Fund is organized as a perpetual-life, open-ended pooled fund for the objective and purpose of creating a high-quality, low risk, diversified portfolio of stabilized, income-producing real estate investments. All authority to conduct the business of the Fund is vested in the General Partner. The managing member of the General Partner is Heitman Capital Management LLC ("HCM"). The General Partner may, at its discretion, appoint an affiliate of HCM to assist in identifying and acquiring suitable investments and to assist with management, administration and operation of the Fund. Any compensation for these services will be paid out of the General Partner's management fees. The General Partner has established an Advisory Board (the "Advisory Board"), in accordance with the Partnership Agreements. The General Partner, in its sole discretion, may consult with the Advisory Board with respect to Fund matters.

The Fund shall continue until dissolved, pursuant to the events of dissolution as defined in the Partnership Agreements.

The General Partner may, at its discretion, establish additional Parallel Fund vehicles. The General Partner shall direct and control the operations of each Parallel Fund.

The General Partner on behalf of the Fund is authorized to enter into one or more credit facilities (each, a "Credit Facility") to finance the acquisition and ownership of real estate investments and to otherwise carry out the business and activities permitted per the Partnership Agreements.

The Fund's initial closing occurred on January 4, 2007, with nine limited partners (the "Initial Limited Partners") totaling $800,000,000 in equity commitments (the "Initial Contributions"). Subsequently, additional equity commitments totaling to $8,135,090,770, including $124,292,760 of PF#1, consisting of 139 investors, increased the total to $8,935,090,770. As of March 31, 2023, the total unfunded capital commitments of the Fund, including $0 of PF#1, were $126,300,000.

All shares acquired are permitted to be redeemed on a quarterly basis. Outstanding redemption requests will be accommodated each calendar quarter as liquid assets permit. To the extent that liquid assets are insufficient during any calendar quarter to satisfy all outstanding redemption requests, redemptions will be made on a pro rata basis as liquid assets become available. The General Partner will have the discretion to determine the extent to which liquid assets are available for redemption or are necessary for the ongoing expenses (including debt payments), investments, capital expenditures or reserves. Shares will be redeemed at a price that reflects the Fund's net asset value as of the last day of the calendar quarter subsequent to the calendar quarter in which the redemption request is received. The Fund will not be obligated to sell, finance or refinance any investments to satisfy redemption requests. For the three months ended March 31, 2023, the Fund did not make any redemption payments. For the year ended December 31, 2022, the Fund redeemed 754,492 shares totaling $1,125,000,000. At March 31, 2023 and December 31, 2022, there were $1,664,429,673 and $1,598,582,044 of outstanding redemption requests, respectively.

Basis of Presentation – The Fund reports as an investment company. The accompanying condensed combined financial statements of the Fund have been presented on the fair value basis of accounting in conformity with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of each of the wholly owned title holding companies owning real estate investments and majority owned or controlled real estate entities. All significant intercompany balances and transactions are eliminated in consolidation and combination.

The Fund has entered into several real estate corporation and venture relationships with third party owner/operators. For those ventures in which the Fund has control over decision making, the underlying accounts are consolidated in the Fund's condensed combined financial statements with the external partners' net share, as determined in accordance with the venture documents, reflected as non-controlling interests.

In accordance with Accounting Standards Codification ("ASC") Topic 810, *Consolidation*, certain entities are considered variable interest entities ("VIEs") because the non-controlling interests do not have substantive kick-out or participating rights. Using the variable interest entity model, the Fund consolidates any VIEs in which the Fund is the primary beneficiary.

Lake Michigan Partners I, L.P., Lake Michigan Partners II, L.P., Heitman Storage Partners Co-Investment PV, LLC, and HHF Life Storage Wasatch Investor, LLC, which own through co-investment 353 North Clark, OneEleven, the iStorage Portfolio, and the Life Storage III Portfolio, respectively, are consolidated VIEs. As of March 31, 2023, the total assets and liabilities of the Fund's consolidated VIEs are $1,980,012,693 and $432,054,280, respectively. As of December 31, 2022, the total assets and liabilities of the Fund's consolidated VIEs are $2,055,069,337 and $438,540,226, respectively.

The Fund does not consolidate those ventures over which it exercises significant influence over operating, investing and financial policies, but does not maintain overall control. These investments in non-consolidated real estate corporations and ventures are recorded at the original investment, plus additional amounts invested and subsequently adjusted for the Fund's share of undistributed earnings or losses (including unrealized appreciation and depreciation) and distributions from the underlying entity.

Income and Distribution Allocations – Income is allocated based on respective share ownership interests among the limited partners.

Distributions are allocated based on respective share ownership interests among the limited partners. Each limited partner may participate in the Dividend Reinvestment Program ("DRIP") and elect to have their distributions reinvested in additional shares in the Fund at a price that reflects the Fund's net asset value as of the last day of the calendar quarter immediately preceding the date of the distribution payment.

Management's Use of Estimates – The preparation of the condensed combined financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the condensed combined financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from these estimates. The Fund's estimates of fair value are based on the best information available to management at the date of valuation. Amounts ultimately realized may vary significantly from the fair values presented.

Risks and Uncertainties – Investing in real estate is subject to risks and uncertainties disclosed in the Fund's private placement memorandum, including the following:

> ***Investment in Real Estate Generally*** – The Fund's investments will be subject to the risks incident to ownership and development of real estate, including risks associated with changes in the general economic climate, changes in the overall real estate market, local real estate conditions, the financial condition of tenants, buyers and sellers of properties, supply of or demand for competing properties in an area, accelerated construction activity, technological innovations that dramatically alter space requirements, the availability of financing, changes in interest rates, competition based on rental rates, energy and supply shortages, operating cost increases, various uninsured and uninsurable risks and government regulations. Overall uncertainty in financial markets, including the impact of inflation and rising interest rates, ongoing geopolitical tensions, actual or perceived instability in the U.S. banking system, and a general decline in business activity could adversely affect the Fund's future operations, cash flows and access to financial markets, and the value of the Fund's investments in real estate and its business.

Real Estate Investments – Real estate investments are carried at estimated fair value. An independent appraisal management firm (the "AMF") oversees and administers the appraisal process for the Fund. The current AMF is Altus Group. Real estate and improvements, held directly or through a consolidated or non-consolidated venture, are stated at estimated fair value approved by the General Partner, based on values presented by the AMF or prepared by the General Partner. Except as provided below, the Fund's real estate and improvements are appraised annually by independent real estate appraisers (members of the American Institute of Real Estate Appraisers). On a quarterly basis, the AMF presents the appraised values, which are updated by the appraisers based upon financial and leasing updates provided by the General Partner and changes in factors such as occupancy levels, lease amendments, overall market conditions and capital improvements.

Prior to its first appraisal, all acquired real estate and improvements will be valued at cost plus capital expenditures, as deemed to approximate fair value, and will join the annual valuation cycle within 12 months following its acquisition date. A value-added property may be valued at the discretion of the General Partner at cost (including subsequent capital expenditures), as deemed to approximate fair value, until the substantial completion of the value-added program (or sooner at the discretion of the General Partner), and thereafter will be appraised in accordance with the procedures described above.

Determination of estimated fair value involves subjective judgment because the actual fair value of real estate can be determined only by negotiation between parties in a sale transaction and amounts ultimately realized may vary from the fair values presented. For the three months ended March 31, 2023 and the year ended December 31, 2022, $106,082 and $1,379,548 of acquisition costs attributable to the Fund were capitalized and written off immediately in unrealized loss on the condensed combined statements of operations.

Cash and Cash Equivalents – The Fund considers all highly liquid instruments purchased with an original maturity of three months or less to be cash equivalents. As of March 31, 2023 and December 31, 2022, $31,963,272 and $47,300,092, respectively, of cash and cash equivalents is invested in an exchange-traded money market fund. From time to time, amounts deposited in operating cash accounts may be in excess of the FDIC insurance level.

For purposes of the presentation of the condensed combined statements of cash flows, the cash and cash equivalents balance is combined with restricted cash held by the Fund. A reconciliation of the balances is shown below.

	As of March 31, 2023	As of December 31, 2022
Cash and cash equivalents	$ 211,411,427	$ 237,305,324
Restricted cash	17,081,150	21,169,685
Total cash and cash equivalents and restricted cash	**$ 228,492,577**	**$ 258,475,009**

Restricted Cash – Restricted cash includes real estate tax, real estate improvement and insurance escrows that are required as part of mortgage note agreements, redevelopment escrows, and security, loan and utility deposits.

Mortgage Notes and Financing Costs – Mortgage notes payable is shown at estimated fair value.

Financing costs represent costs incurred in connection with obtaining the mortgage notes, Credit Facility, and private placement debt.

Credit Facility – The Credit Facility is shown at estimated fair value. Cost approximates fair value as of March 31, 2023 and December 31, 2022.

Private Placement Debt – Private placement debt payable is shown at estimated fair value.

Derivative Financial Instrument – In the normal course of business, derivative financial instruments are used to manage or hedge interest rate risk. The Fund has entered into interest rate swap agreements on three mortgage notes payable to effectively cap or convert floating rate debt to a fixed rate basis. The change in fair value of the derivative financial instruments are recorded to the condensed combined statements of operations as an unrealized gain or loss.

The Fund records its derivative financial instruments, interest rate swaps, at fair value, which is the estimated amount that the Fund would receive or pay in a current exchange transaction. As of March 31, 2023 and December 31, 2022, the interest rate swaps were recorded in other assets in the amounts of $2,297,159 and 1,501,369, respectively.

Distributions Payable – The Fund recognizes undistributed declared distributions as a payable as of the date of the condensed combined statements of net assets.

Revenue Recognition – Revenue from real estate and improvements is recognized on an accrual basis when earned in accordance with the terms of the underlying lease agreements. Other lease rental income, such as adjustments based on the Consumer Price Index, charges to tenants for their share of operating expenses, and percentage rents based on sales, are recognized when earned.

Lease cancellation fees are recognized as income when the lease is terminated. For the three months ended March 31, 2023 and the year ended December 31, 2022, the Fund recorded $280,422 and $1,494,738, respectively, of lease cancellation income. Such amounts are included in the condensed combined statements of operations as revenues from real estate and improvements.

Income Taxes – The Fund is not subject to federal and state income taxes. Taxable income and losses of the Fund are reportable on the income tax return of the respective partners. The Fund makes certain investments through subsidiaries that operate as real estate investment trusts ("REITs") under Sections 856 through 860 of the Internal Revenue Code. In order to qualify as a REIT for federal income tax purposes, a REIT must continually satisfy certain requirements including, but not limited to, distributing at least 90% of its ordinary taxable income. A REIT may distribute all of its capital gains or pay corporate income tax on any undistributed capital gains. In addition, REITs are required to meet certain asset and income tests.

REITs are generally not subject to corporate level federal income tax on taxable income distributed currently to shareholders. If an entity fails to qualify as a REIT, it would be subject to federal income taxes at regular corporate rates and may not be able to qualify as a REIT for four subsequent taxable years. Even if an entity qualifies as a REIT, it may be subject to certain state and local taxes on income or property and to federal income and excise taxes on undistributed taxable income and capital gain. The Fund's subsidiaries that operate as REITs have distributed 100% of their taxable income and therefore no provision for federal income taxes has been made in the accompanying condensed combined financial statements.

The Fund holds certain investments in taxable REIT subsidiaries ("TRSs"), which are subject to taxation at normal corporate rates. A provision for income tax expense, which is not significant, has been recorded in general and administrative expenses on the condensed combined statements of operations.

The Fund evaluates tax positions taken in the course of preparing the Fund's tax returns to determine whether tax positions are "more likely than not" of being sustained by the applicable tax authority. Tax benefits of positions not deemed to meet the "more likely than not" threshold would be recorded as a tax expense in the current year. For the three months ended March 31, 2023 and the year ended December 31, 2022, there have been no uncertain tax positions.

Leases – The Financial Accounting Standards Board (the "FASB") issued ASC Topic 842, *Leases*, which amended the guidance in former ASC Topic 840. The new leasing standard requires lessees to recognize operating leases on their condensed combined statements of net assets by recording a right-of-use asset ("RoU") and a corresponding lease liability for the rights and obligations associated with operating leases. ASC 842 also modified certain targeted changes to lessor accounting.

The Fund adopted ASC 842 effective January 1, 2022 under the modified retrospective approach and elected the optional transition method to apply the provisions of ASC 842 as of the adoption date, rather than to all comparative periods. The Fund also elected the practical expedient transition package which permits the Fund to not reassess: (1) whether any expired or existing contracts are or contain leases, (2) the lease classification for any expired or existing leases, and (3) any initial direct costs for any existing leases as of the effective date.

In July 2018, the FASB issued Accounting Standards Update ("ASU") 2018-11, *Leases – Targeted Improvements* ("ASU 2018-11"). ASU 2018-11 provides a practical expedient, which allows lessors to combine non-lease components with the related lease components if (1) both the timing and pattern of transfer are the same for the non-lease component(s) and related lease component, and (2) the lease component would be classified as an operating lease if accounted for separately. Lessors are permitted to apply the practical expedient to all existing leases on a retrospective (if there is no change to previously reported total revenues and expenses) or prospective basis. The Fund elected the practical expedient to combine its lease (right to use an underlying asset) and non-lease components (transfer of a good or service that is not a lease) that meet the defined

criteria and will account for the combined lease component under ASC 842 on a prospective basis. These amounts are reported as revenues from real estate and improvements within the condensed combined statement of operations.

The Fund's leases where it is the lessee primarily consist of ground leases which are classified as operating leases upon adoption of the new leasing standard. ASC 842 requires the Fund to record a RoU asset and related lease liability for the rights and obligations associated with these operating leases. As of March 31, 2023 and December 31, 2022, the balance of lease liabilities was $63,400,000 and $67,400,000, respectively, and RoU assets was $63,400,000 and $67,400,000, respectively. These lease liabilities and RoU assets are included in the condensed combined statement of net assets in other liabilities and other assets, respectively.

The Fund values the lease liabilities and RoU assets on a quarterly basis and the amount of unrealized gain (loss) between the lease liabilities and RoU assets offset to have no material impact on net assets. For the three months ended March 31, 2023 and the year ended December 31, 2022, the Fund recorded unrealized gain of $4,000,000 and $7,200,000, respectively, on the lease liabilities and unrealized loss of $4,000,000 and $7,200,000, respectively, on the RoU assets.

The Fund's current lessee lease portfolio is comprised primarily of operating leases. If the Fund enters into a new ground lease or modifies an existing ground lease, the lease classification will have to be reassessed in accordance with ASC 842.

2. REAL ESTATE INVESTMENTS

The Fund's real estate investments consist of direct and venture investments with third-party owner/operators. The ventures allocate income to the venture partners based on achieving certain estimated threshold returns. As higher estimated return thresholds are met, a larger income allocation is made to the third-party venture partners (the "Promote"). Therefore, the Promote may cause the Fund's effective ownership interest in a venture's net assets to be different than its legal ownership percentage. Non-consolidated real estate corporations and ventures, and net assets attributable to non-controlling interests, reflect the impact of the Promote (if any). The estimated venture returns are calculated in accordance with each venture's documents and reflect the deemed liquidation of each venture's net assets.

The ventures allocate distributions to the venture partners based on achieving actual return thresholds. As higher actual return thresholds are met, a larger portion of the distributions is made to the third-party venture partners ("Promote Distribution"). For the three months ended March 31, 2023 and the year ended December 31, 2022, no Promote Distributions were made as certain thresholds were not achieved.

As of March 31, 2023 and December 31, 2022, the Fund has $244,341,738 and $240,802,086, respectively, of unfunded capital commitments to real estate and improvements and non-consolidated real estate corporations and ventures (subject to various terms and conditions in accordance with the venture agreements).

3. CREDIT FACILITY

The Fund entered into a $200,000,000 Credit Facility agreement with Bank of America ("BofA") on April 24, 2013. On July 1, 2013, BofA, as the administrative agent, evenly assigned 63.75% of the Credit Facility to three additional institutions, JP Morgan Chase Bank, PNC Bank, and Wells Fargo Bank (collectively with BofA the "Lenders").

During 2015, the Fund amended the Credit Facility agreement, increasing to a maximum aggregated principal amount of $400,000,000. BofA has committed 31.25% of the Credit Facility and has assigned 21.25% to JP Morgan Chase Bank, 16.25% to PNC Bank, and 31.25% to Wells Fargo Bank.

On June 27, 2018, the Fund amended the Credit Facility agreement, by extending the term of the loan to June 27, 2021. All other terms from the previously amended agreement remained the same.

On June 27, 2021, the Fund exercised the first of two options to extend the term of the Credit Facility by one year to June 27, 2022. All other terms from the previously amended agreement remained the same.

On June 24, 2022, the Fund amended the Credit Facility agreement to extend the term of the loan to June 24, 2025. The amended maximum aggregated principal amount may not exceed $750,000,000. The index rate for the Credit Facility has been amended to Secured Overnight Financing Rate ("SOFR"). All other terms from the previously amended agreement remained the same.

The Fund has the ability to request Credit Facility increases. The increase must be greater than or equal to $25,000,000 and in integral multiples of $1,000,000 in excess thereof. Each lender shall notify the administrative agent whether or not it agrees to increase its commitment, and if so, whether by an amount equal to, greater than, or less than the assigned percentages.

The Fund is a guarantor of the Credit Facility. The amended Credit Facility matures on June 24, 2025, with one one-year extension option, which is subject to compliance with financial covenants, and is exercisable at the Fund's discretion.

Provided the ratio of total indebtedness to total asset value is below 30%, the floating daily interest rate for each borrowing is the Daily Simple SOFR plus 1.00%. Additionally, the Fund pays annually a facility fee of 15 basis points and an administrative agency fee of $50,000. Should the ratio of indebtedness fall within the range between 30%-40%, the floating daily interest rate for each borrowing would be the Daily Simple SOFR plus 1.15%. Additionally, the Fund would continue to pay annually a facility fee of 20 basis points and an administrative agency fee of $50,000. Should the ratio of indebtedness be greater than 40%, the floating daily interest rate for each borrowing would be the Daily Simple SOFR plus 1.25%. Additionally, the Fund would continue to pay annually a facility fee of 20 basis points and an administrative agency fee of $50,000.

Payments of interest are made on a monthly basis. Facility fees and administrative agency fees are included in the condensed combined statements of operations as general and administrative expenses. The

Fund additionally has the option to take out letters of credit up to 10% of the Credit Facility's aggregate commitment, on which it would pay a fronting fee with respect to each letter of credit issued and outstanding equal to 0.125% per year of the amount available to be drawn. The borrowings are pre-payable in whole or in part without prepayment penalty given three business days' notice for such prepayment. As of March 31, 2023 and December 31, 2022, no letters of credit have been issued.

As of March 31, 2023 and December 31, 2022, $15,000,000 and $0, respectively, were outstanding under the Credit Facility at daily floating interest rates of the Daily Simple SOFR rate plus 1.10%, which at March 31, 2023 and December 31, 2022 were 5.87% and 0%, respectively. A summary of the Credit Facility as of March 31, 2023 and December 31, 2022 is below.

The Fund has agreed to maintain certain financial ratios, including ratios of indebtedness to net assets. Management believes the Fund was in compliance with all financial covenants at March 31, 2023.

4. MORTGAGE NOTES PAYABLE AND PRIVATE PLACEMENT DEBT PAYABLE

On April 1, 2022, the Fund placed $125,000,000 in unsecured private placement notes with varying fixed interest rates. The interest only notes are divided into two tranches, US Private Placement Series A and US Private Placement Series B, of $62,500,000 each. On May 17, 2022, the Fund placed $125,000,000 in unsecured private placement notes with varying fixed interest rates. The interest only notes are divided into two tranches, US Private Placement Series C and US Private Placement Series D, of $62,500,000 each. The notes are guaranteed by the Fund, which agrees to maintain certain covenant requirements. Management believes the Fund was in compliance with all covenant requirements at March 31, 2023. A summary of Private Placement Debt Payable as of March 31, 2023 and December 31, 2022 is below.

On May 17, 2022, the Fund paid off the outstanding balance of the Premiere on Pine mortgage note of $88,702,684 with no prepayment penalty.

On June 20, 2022, the Fund transferred the mortgage note payable on 1401 Lawrence with an outstanding balance of $90,000,000 to the Dallas Industrial Portfolio. The note is interest only with a fixed interest rate of 3.60% and a maturity date of April 1, 2030. The note is collateralized by a mortgage on real property and all rents and profits of the underlying properties.

On December 1, 2022, the Fund refinanced the mortgage note on the Storage Post I Portfolio, paying the outstanding balance of $106,600,000. The refinanced mortgage note is in the amount of $150,000,000. The note is interest only with a contractual floating rate of 1.60% plus 1-month SOFR, fixed by an interest rate swap with a strike rate of 3.88%, for a total fixed interest rate of 5.48%, maturing December 1, 2025. The note is collateralized by a mortgage on real property and all rents and profits of the underlying portfolio.

On December 1, 2022, the Fund refinanced the mortgage note on the Storage Post II Portfolio, paying the outstanding balance of $48,400,000. The refinanced mortgage note is in the amount of $50,000,000. The note is interest only with a contractual floating rate of 1.60% plus 1-month SOFR, fixed by an interest rate swap with a strike rate of 3.88%, for a total fixed interest rate of 5.48%, maturing December 1, 2025. The note is collateralized by a mortgage on real property and all rents and profits of the underlying portfolio.

On February 28, 2023, the Fund refinanced the mortgage note on the West Coast Industrial Portfolio, paying the outstanding balance of $220,000,000. The refinanced mortgage note is in the amount of $220,000,000. The note is interest only with a fixed rate of 5.58% and a maturity date of September 5, 2027. The note is collateralized by a mortgage on real property and all rents and profits of the underlying portfolio.

As of March 31, 2023 and December 31, 2022, the fair value of mortgage notes payable totaled $1,916,886,993 and $1,917,069,488, respectively, bearing fixed interest rates of 2.55% - 5.58% and 2.55% - 5.48%, respectively. As of March 31, 2023 and December 31, 2022, these mortgage notes payable were collateralized by properties with an aggregate fair value

CREDIT FACILITY AND PRIVATE PLACEMENT DEBT PAYABLE

	March 31, 2023		December 31, 2022				
	Principal	Fair Value	Principal	Fair Value	Interest Rate	Origination Date	Maturity Date
Credit facility[1]	$ 15,000,000	$ 15,000,000	$ -	$ -	SOFR + 1.10%	6/24/22	6/24/25
US Private Placement Tranche #1	125,000,000	120,800,133	125,000,000	120,755,232	3.77%	2/15/18	2/15/27
US Private Placement Tranche #2	125,000,000	120,800,133	125,000,000	120,755,232	3.77%	3/27/18	2/15/27
US Private Placement Series A	62,500,000	57,093,287	62,500,000	57,148,959	3.24%	4/1/22	4/1/32
US Private Placement Series B	62,500,000	56,265,701	62,500,000	56,352,802	3.34%	4/1/22	4/1/34
US Private Placement Series C	62,500,000	57,037,116	62,500,000	57,094,987	3.24%	5/17/22	5/17/32
US Private Placement Series D	62,500,000	56,216,408	62,500,000	56,305,314	3.34%	5/17/22	5/17/34
Total credit facility and private placement debt	**515,000,000**	**483,212,778**	**500,000,000**	**468,412,526**			

1. As of March 31, 2023 and December 31, 2022 SOFR was 4.87% and 4.30%, respectively.

of $5,038,993,934 and $5,235,938,576, respectively. All of the mortgage notes payable contain prepayment penalty provisions. As of March 31, 2023, aggregate contractual maturities of debt are as follows by calendar year:

Year Ending December 31		
2023	$	27,844,076
2024		94,267,147
2025		618,906,558
2026		1,681,820
2027		608,549,718
Thereafter		1,144,461,485
Total	**$**	**2,495,710,804**

The Fund has $42,053,382 of debt maturing within one year of the issuance date of the condensed combined financial statements. The Fund has the intent and ability to refinance or pay down the mortgage notes payable upon maturity.

5. RELATED PARTY TRANSACTIONS

The Fund has engaged the General Partner to provide investment management services. Below is a detailed summary of the fees incurred for these services for the three months ended March 31, 2023 and the year ended December 31, 2022.

SCHEDULE OF INVESTMENT MANAGEMENT FEES

Investment Management Fees	Financial Statement Caption	Three Months Ended March 31, 2023	Year Ended December 31, 2022	Fee Description
Loan Origination[1] [4]	Financing Costs	$ 440,000	$ 625,000	0.25% of new loan proceeds
Asset Management Fees[2]	N/A[3]	17,898,976	78,915,555	% of NAV (varies)
Total Investment Management Fees		**$ 18,338,976**	**$ 79,540,555**	

1. In accordance with the Partnership Agreements, the Fund will pay the General Partner financing fees for each financing that the General Partner arranges on behalf of the Fund.
2. In accordance with the Partnership Agreements, each of the limited partners has separately engaged the General Partner to provide asset management services. For the three months ended March 31 ,2023 and the year ended December 31, 2022, the limited partners paid asset management fees in the amounts of $19,017,331 and $79,251,691, respectively. As of March 31, 2023 and December 31, 2022, asset management fees of $17,898,976 and $19,017,331, respectively, remain outstanding to be paid by the limited partners.
3. Asset Management Fees are not included in the Fund's condensed combined financial statements as the asset management service arrangements are directly between the limited partners and the General Partner. The General Partner may direct a portion of the limited partners' distributions to the General Partner for payment of such asset management fees. If such amount is insufficient to cover the asset management fee in any quarter, the limited partner will be required to remit the difference to the General Partner.
4. For the three months ended March 31, 2023 and the year ended December 31, 2022, the Fund paid $440,000 and $625,000, respectively, in financing fees at a rate of 0.25% for the new private placement notes.

For the three months ended March 31, 2023 and the year ended December 31, 2022, the Fund did not incur any financing fees to the General Partner for non-consolidated real estate corporations and ventures.

For the three months ended March 31, 2023 and the year ended December 31, 2022, the Fund incurred $0 and $1,228,750, respectively, of acquisition fees to certain of its venture partners. In addition, the Fund's venture partners are paid a property management fee based on a percentage of gross receipts ranging from 1.5% - 6.0%.

6. FINANCIAL HIGHLIGHTS

The Fund computes net assets per share on a quarterly basis. The financial highlights for the three months ended March 31, 2023 and the year ended December 31, 2022 are as follows:

Per share operating performance	2023	2022
Net asset value, beginning of period	**$ 1,497.1290**	**$ 1,399.7964**
Income from investment operations		
Net investment income	13.3699	55.3334
Net realized and unrealized gain (loss)	(66.4132)	94.1921
Total from investment operations	**(53.0433)**	**149.5255**
Less distributions	(12.1497)	(52.1929)
Net asset value, end of period	**$ 1,431.9360**	**$ 1,497.1290**
Total return[1] [2]	-3.6%	10.7%
Supplemental Data:		
Net assets, end of period	$ 9,864,687,959	$ 10,293,826,036
Ratios to average net assets: [2] [3]		
Total expenses	1.0%	3.4%
Net investment income	1.1%	4.0%

1. Net assets attributable to the Fund calculated on an asset-weighted basis using beginning of period values, adjusted for contributions, including reinvested dividends, redemptions, and distributions. Contributions, redemptions, and distributions are weighted based on the effective date of cash flows.
2. An individual limited partner's total return and ratios to average net assets may differ due to the timing of contributions and redemptions.
3. Average net assets are calculated as the average of the ending quarterly net assets, attributable to the Fund, for the three months ended March 31, 2023 and the year ended December 31, 2022.

7. SUBSEQUENT EVENTS

On April 19, 2023, the Fund borrowed $40,000,000 on the Credit Facility at a floating interest rate of 5.90%.

On April 20, 2023, the Fund made a distribution in the amount of $83,700,000 from operating cash flow, of which asset management fees of $17,898,976 were paid directly to the General Partner by the limited partners. In addition, $16,442,488 of the distribution was reinvested into the Fund as part of the limited partners' elected DRIP.

The Fund evaluated activity through May 5, 2023 (the date these condensed combined financial statements were available to be issued) and concluded that no additional subsequent events have occurred that would require recognition or additional disclosure.

CEREDEX
VALUE ADVISORS®

First Quarter 2023

SMALL CAP VALUE STRATEGY

Presented to:

City of Fort Pierce, Florida Retirement and Benefit System

May 18, 2023

FOR INSTITUTIONAL USE ONLY. THIS PRESENTATION WAS PREPARED BY CEREDEX VALUE ADVISORS LLC AT THE REQUEST OF AND FOR THE EXCLUSIVE USE OF THE CITY OF FORT PIERCE, FLORIDA RETIREMENT AND BENEFIT SYSTEM AND MAY NOT BE USED FOR ANY OTHER PURPOSES. THIS MATERIAL MAY NOT BE SUITABLE FOR OTHERS AND SHOULD NOT BE REDISTRIBUTED. PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

CEREDEX VALUE ADVISORS

A focus on fundamental analysis. A record of attractive long-term returns.

STABILITY

- Long-tenured organization dedicated to value equity investing since 1989
- A market-seasoned, efficient 14-member investment team

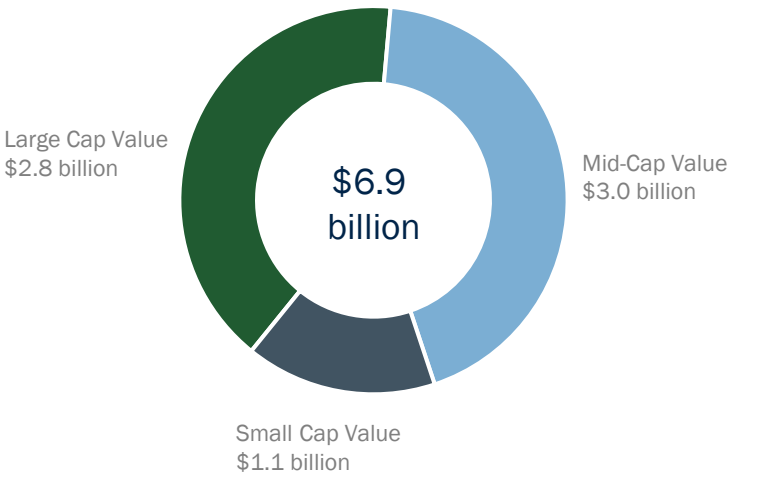
FOCUS

- One team applying one philosophy and one approach
- Managing domestic large-, mid-, and small-cap value portfolios

FUNDAMENTAL VALUE

- Analysis that seeks to identify quality companies trading at attractive valuations
- Bifurcating the market between lower- and higher-expectations stocks

AUM ($ BILLIONS)



FIRM ATTRIBUTES

- Headquartered in Orlando, Florida
- $6.9 billion in AUM
- Wholly owned subsidiary of Virtus Investment Partners
- Serves institutions, retirement platforms, and financial professionals
- Client-centric—a history of attractive risk/reward outcomes

As of March 31, 2023 (includes subadvisory relationships and separate accounts.)

INVESTMENT PLATFORM

CEREDEX VALUE ADVISORS®

Ceredex value equity strategies

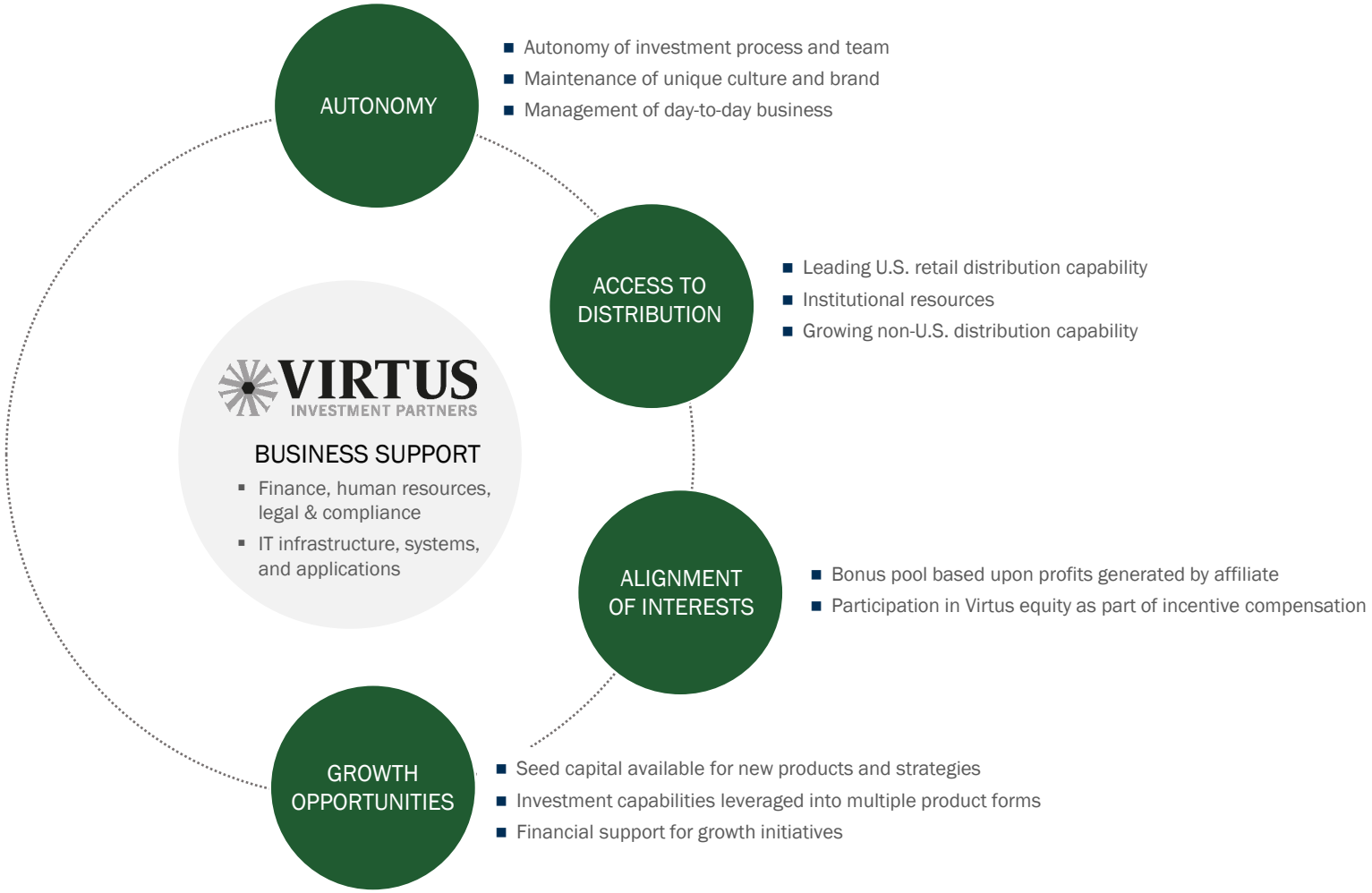
	LARGE CAP VALUE	MID-CAP VALUE	SMALL CAP VALUE	CONCENTRATED LARGE	CONCENTRATED SMID
PORTFOLIO MANAGERS	Mills Riddick, CFA Jennifer Graff, CFA	Don Wordell, CFA Cody Smith, CFA	Brett Barner, CFA Don Wordell, CFA Charles Carter, CFA	Mills Riddick, CFA Jennifer Graff, CFA	Don Wordell, CFA Cody Smith, CFA
TENURE	Since 1995 Since 2021	Since 2001 Since 2023	Since 1995 Since 2023 Since 2023	Since 2018 Since 2021	Since 2019 Since 2023
MARKET CAP	Generally range of Russell 1000® Value Index	Generally 80% within the range of the Russell Midcap® Index	Generally range of Russell 2000® Index on a rolling 3-year average	Generally range of Russell 1000® Value Index	Generally range of Russell 2500® Index
HOLDINGS	30-50	40-60	50-80	Typically 20	Typically no more than 35
AVERAGE ANNUAL TURNOVER	75%-100%	125%-175%	50%-75%	115%-140%	
AUM AS OF 3/31/23	$2.8 B	$3.0 B	$1.1 B	$1.6 mm*	$1.1 mm*
INCEPTION DATE	7/1/1998	4/1/2002	1/1/1998	4/1/2018	12/31/2019

INVESTMENT STRATEGIES AVAILABLE IN: Separate Accounts + Mutual Funds + Collective Trusts†

As of 3/31/23.
*Funded with Virtus seed capital
†Large- and Mid-Cap, available to qualified retirement plan investors.

VIRTUS INVESTMENT PARTNERS

Multi-boutique model—an approach that preserves each affiliate's unique entrepreneurial culture, provides continued investment autonomy, and ensures appropriate alignment of interests



INVESTMENT TEAM

PORTFOLIO MANAGERS *25 years average firm experience, 28 years industry*

Mills Riddick, CFA
Chief Investment Officer
Large Cap Value
1989
41 years industry

Don Wordell, CFA
Mid-Cap Value
Small Cap Value
1996
26 years industry

Brett Barner, CFA
Small Cap Value
1990
37 years industry

Jennifer Graff, CFA
Large Cap Value
2001
22 years industry

Cody Smith, CFA
Mid-Cap Value
Healthcare, Technology
2007
18 years industry

Charles Carter, CFA
Small Cap Value
Consumer
2004
22 years industry

EQUITY ANALYSTS *9 years average firm experience, 17 years industry*

Jason Fraser, CFA
Financials, Telecom
2011
17 years industry

Hein Hanekom, CFA
Technology, Utilities
2007
17 years industry

Casey D. Johnson
Energy, Materials
2020
19 years industry

David Maynard
Industrials
2014
17 years industry

George Enstad, CFA
Financials
2022
12 years industry

Meghan Civiello, CFA
Research Analyst
2023
16 years industry

TRADERS *20 years average firm experience, 23 years industry*

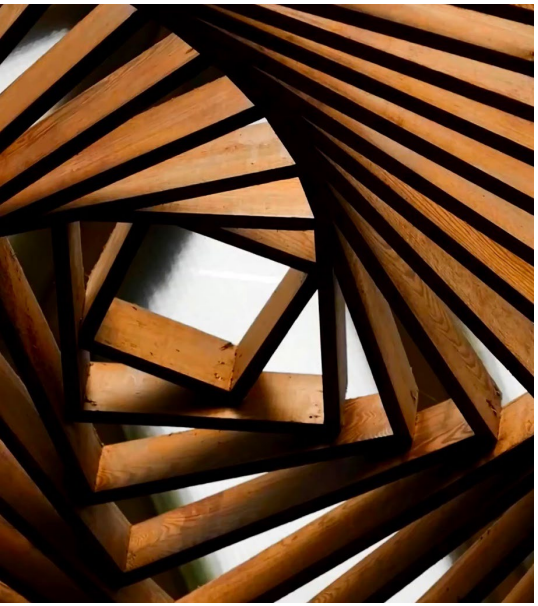
Joe Ward, CFA*
Head Trader
2008
20 years industry

Steve Smith, CFA*
Trader
1997
25 years industry

- One philosophy, one process, one team
- Dynamic investment culture
- Fosters nimble decision making
- Natural contingency features

As of 3/31/23.
Portfolio Managers and Equity Analysts joined Ceredex or a predecessor of Ceredex in the year referenced.
*Employees of Virtus Shared Services, LLC

THE CEREDEX INVESTMENT STYLE



PHILOSOPHY

We believe equity portfolios of dividend-paying companies exhibiting lower expectations and displaying attractive valuations accompanied by solid and improving fundamentals can provide an attractive risk-reward profile.

PRINCIPLES

- Identify good capital allocators among dividend-paying companies
- Seek lower expectation stocks that exhibit attractive historical valuations
- Use rigorous fundamental analysis to determine the true value of companies
- Fact-based, opportunistic active management

Dividends reflect past performance and there is no guarantee they will continue to be paid.

INVESTMENT PROCESS

CERE+DEX VALUE ADVISORS®

		LARGE CAP	MID-CAP	SMALL CAP	CONCENTRATED LARGE	CONCENTRATED SMID
		1,500 Companies	~1,300 Companies	1,000 Companies	1,500 Companies	~1,300 Companies
1	SCREENING to narrow the universe to quality, low-expectation, dividend-paying companies	~500	~500	~500	~500	~500
2	BOTTOM-UP FUNDAMENTAL ANALYSIS to confirm quality and identify investment thesis	~200	~200	~200	~200	~200
3	PORTFOLIO CONSTRUCTION balances conviction and diversification	30-50	40-60	50-80	~20	Typically no more than 35
4	RISK MANAGEMENT/SELL DISCIPLINE that is robust and objective					

Dividends reflect past performance and there is no guarantee they will continue to be paid.

1 SCREENING

CEREDEX VALUE ADVISORS®

Striving to identify undervalued companies with demonstrated capital allocation discipline

DIVIDEND REQUIREMENT

We believe dividends represent the most stable form of return of capital to equity holders and indicate:

- Effective capital allocation practices
- Management's confidence in the business outlook
- Financial discipline
- Earnings power and transparency

VALUATIONS

- Tailor valuation metrics relevant to industry and company
  - P/E, P/S, EV/S, EV/EBITDA, relative yield
- Identify most relevant comparisons
  - Company-specific history
  - Peer group and sector
  - Market averages
- Assess consensus/street estimates and expectations

Dividend Paying Companies:
Demonstrated Skill and Discipline in Capital Allocation



Past performance is not indicative of future results. Source: Ned Davis Research. © 2023 Ned Davis Research, Inc. Further distribution prohibited without prior permission. All rights reserved. See NDR disclaimer at https://www.ndr.com/copyright.html. For data vendor disclaimers refer to www.ndr.com/vendorinfo.
Dividends reflect past performance and there is no guarantee they will continue to be paid.

2 FUNDAMENTAL ANALYSIS

CEREDEX VALUE ADVISORS®

Confirming the quality and identifying the investment thesis

DEVELOPING AN INFORMATIONAL MOSAIC

- Financial analysis
- Industry analysis
- Independent financial model
- Qualitative research
  - Meeting company executives, competitors, suppliers, and customers
  - Discovering why a stock is misunderstood
  - Evaluating the potential of catalysts
  - Uncovering idiosyncrasies of the stock
- Timeliness—verify substantial potential for market recognition within target holding horizon (LC and MC: 12-24 months, SC: 18-36 months)

EXAMPLES OF CATALYSTS

- Cost-cutting measures
- Changes in competitive positioning
- Product line changes
- Management restructuring
- Growth and acquisition possibilities

INVESTMENT THESIS

For each stock analyzed

- Catalysts for improvement
- Risk-return expectations
- Potential risks to the thesis
- Setting price targets

OUTCOME: develop buy/sell decision

3 PORTFOLIO CONSTRUCTION

CEREDEX VALUE ADVISORS®

Balancing conviction and diversification through an active and flexible approach

FACT-BASED DECISION MAKING	▪ Collaboration between Analyst and PM; PM has decision-making authority ▪ Removes emotion; decisions made exclusively on facts, conditions, and analysis ▪ Strongest investment theses result in buy recommendations ▪ 3 TO BUY/1 TO SELL — Dividends, Valuation, and Fundamentals
POSITION SIZING	▪ Upside/downside expectations ▪ Conviction ▪ Liquidity ▪ Active position
INVESTMENT HORIZON	▪ LC and MC: 12-24 months, SC: 18-36 months
PORTFOLIO GUIDELINES	▪ Max. position size 5% of portfolio, at cost ▪ Holdings: 30 to 50 Large Cap; 40 to 60 Mid-Cap; 50 to 80 Small Cap; ~20 Concentrated Large Cap Value; Typically no more than 35 Concentrated SMID ▪ Sector and industry weights result from security selection – Max. sector weight – none – Max. industry weight – 20% (as defined by GICS) ▪ Capitalization: – Large Cap: generally range of the index Russell 1000® Value Index – Mid-Cap: generally 80% within the range of the index Russell Midcap® Index – Small Cap: generally range of the Russell 2000® Index on a 3-year rolling average – Concentrated Large: generally range of the Russell 1000® Value Index – Concentrated SMID: generally range of the Russell 2500™ Index

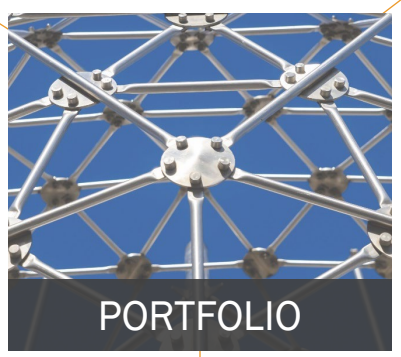
4 RISK MANAGEMENT

CEREDEX VALUE ADVISORS®

Comprehensive approach primarily driven by investment analysis

INVESTMENT TEAM
Risk Management Disciplines

- Quality Focus
- Fundamental Analysis/ Continual Monitoring and Re-Underwriting
- Fact-Based Decision Making
- Price Targets
- Stress Tests
- CIO/PM Reviews
- Sell Discipline



PORTFOLIO

OBJECTIVE REVIEW
Monitoring & Analysis

Investment Oversight Committee

Performance Analytics/Attribution

Risk Analysis Systems

- Citigroup USRAM
- FactSet SPAR
- R-Squared Daily Global Equity Model

SELL DISCIPLINE
3 to Buy / 1 to Sell

We will sell a portfolio holding if any one of these conditions occurs:

1. Company fundamentals deteriorate
2. The company discontinues its dividend
3. The security reaches its valuation target or a more attractive opportunity is identified

PRODUCT RISKS

CERES DEX VALUE ADVISORS®

Important Risk Considerations

EQUITY SECURITIES

- The market price of equity securities may be adversely affected by financial market, industry, or issuer-specific events.
- Focus on a particular style or on small, medium, or large-sized companies may enhance that risk.

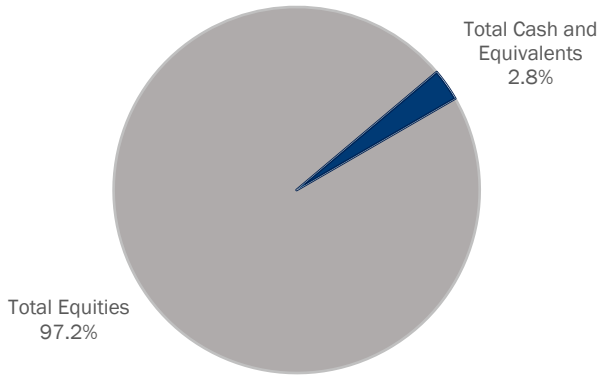
VALUE STOCKS

- Value stocks are subject to the risk that the broad market may not recognize their intrinsic value.

MARKET VOLATILITY

- The value of the securities in the portfolio may go up or down in response to the prospects of individual companies and/or general economic conditions.
- Local, regional, or global events such as war, terrorism, pandemic, or recession could impact the portfolio, including hampering the ability of the portfolio's manager(s) to invest its assets as intended.

PORTFOLIO COMPOSITION



Assets	Market Value ($)	% of Total
Total Portfolio	7,434,797.13	100.0
Total Equities	7,223,243.01	97.2
Total Cash and Equivalents	211,554.12	2.8

Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023.
Past performance is not indicative of future results.
This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

ACCOUNT ACTIVITY SUMMARY—QUARTER

CEREDEX VALUE ADVISORS®

Beginning Portfolio Market Value 12/31/2022	$	7,155,585.13
Contributions	$	-
Withdrawals	$	(16,110.39)
Net Contributions/Withdrawals	$	(16,110.39)
Portfolio Earnings		
Interest	$	3,639.98
Dividends	$	49,431.36
Realized Gains/Losses	$	289,009.82
Unrealized Gains/Losses	$	(46,758.77)
Total Portfolio Earnings	$	295,322.39
Ending Portfolio Market Value 03/31/2023	**$**	**7,434,797.13**
Net Change	$	279,212.00

Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023.

Past performance is not indicative of future results.

Dividends reflect past performance and there is no guarantee they will continue to be paid. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

ACCOUNT ACTIVITY SUMMARY—ANNUAL

CEREDEX VALUE ADVISORS®

Beginning Portfolio Market Value 03/31/2022	$	7,365,342.68
Contributions	$	-
Withdrawals	$	(61,400.85)
Net Contributions/Withdrawals	$	(61,400.85)
Portfolio Earnings		
Interest	$	6,221.68
Dividends	$	166,561.59
Realized Gains/Losses	$	390,032.04
Unrealized Gains/Losses	$	(431,960.01)
Total Portfolio Earnings	$	130,855.30
Ending Portfolio Market Value 03/31/2023	**$**	**7,434,797.13**
Net Change	$	69,454.45

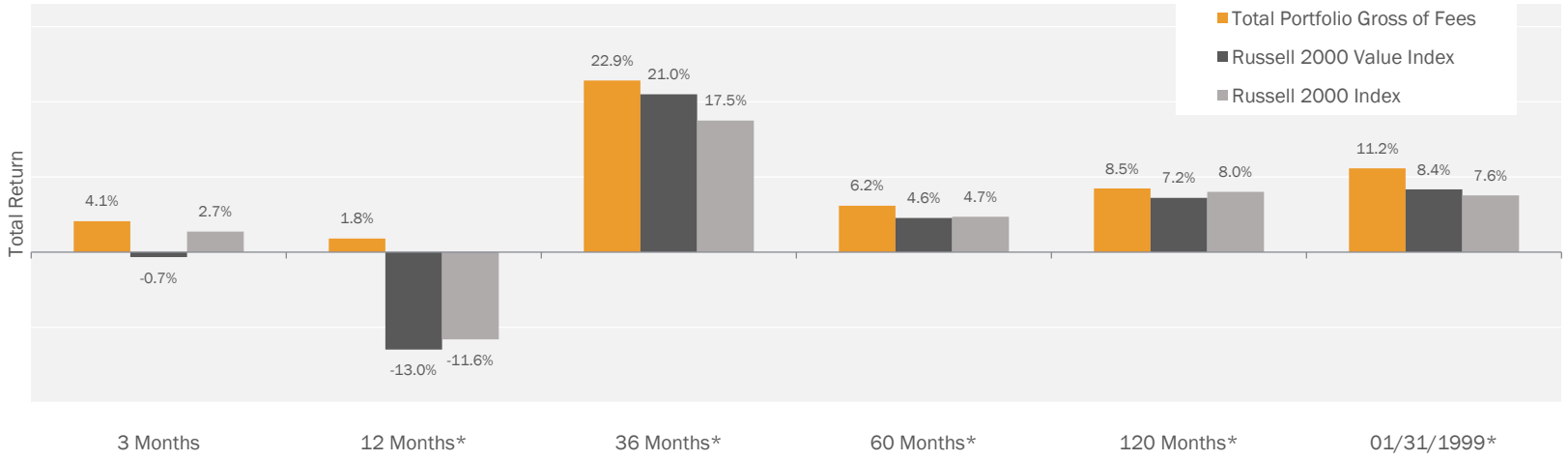
Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023.

Past performance is not indicative of future results.

Dividends reflect past performance and there is no guarantee they will continue to be paid. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

PERFORMANCE COMPARISONS

	3 Months	12 Months*	36 Months*	60 Months*	120 Months*	Inception to Date 01/31/1999*
Total Portfolio Gross of Fees	**4.12 %**	**1.82 %**	**22.85 %**	**6.18 %**	**8.48 %**	**11.15 %**
Russell 2000 Value Index	-0.66 %	-12.96 %	21.01 %	4.55 %	7.22 %	8.35 %
Russell 2000 Index	2.74 %	-11.61 %	17.51 %	4.71 %	8.03 %	7.56 %



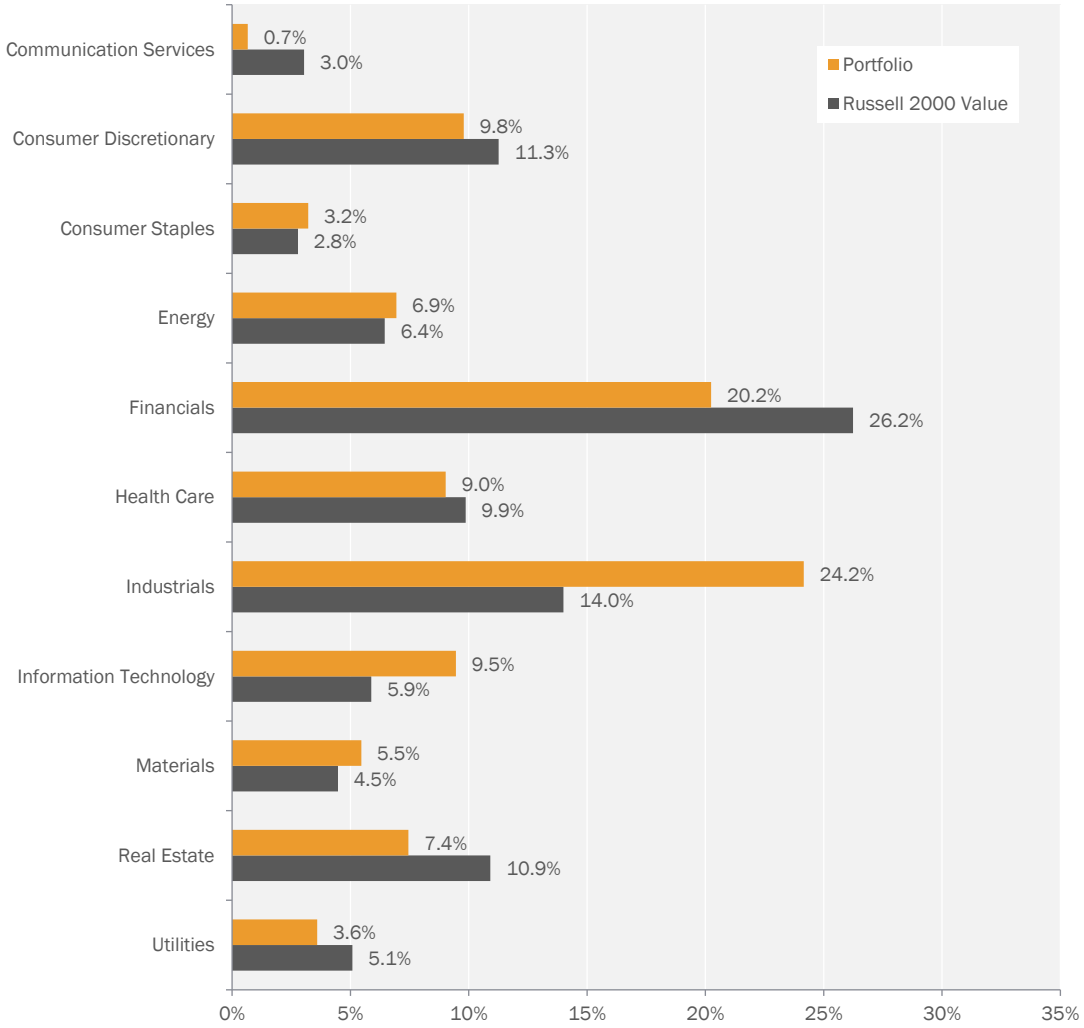
Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023. *Annualized returns.

Past performance is not indicative of future results.

The comparative performance contained herein reflects annualized returns for specific time periods, are gross of all fees, are not indicative of actual annual returns, and may not be relied upon for investment decisions. See Investment Performance Disclosure in Appendix. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

SMALL CAP VALUE—CURRENT POSITIONING

SECTOR WEIGHTS



CHARACTERISTIC	PORTFOLIO	INDEX
Market Cap (billion)	$5.3	$2.4
Dividend Yield	2.3%	2.3%
Price-to-Earnings (FY1)	13.1	11.2
EV/EBITDA (FY1)	9.3	28.2
EV/Sales (FY1)	1.1	3.1
ROA	6.5	1.8
ROE	13.3	6.2
Holdings	79.0	1,362.0
Active share	96.4	-
AUM (million)	$7.4	-

HOLDING	PORTFOLIO %
Perrigo Co. Plc	3.8
Academy Sports and Outdoors, Inc.	3.2
Stantec Inc	2.8
Ritchie Bros. Auctioneers Incorporated	2.7
Power Integrations, Inc.	2.6
Dolby Laboratories, Inc. Class	2.5
DENTSPLY SIRONA, Inc.	2.3
EMCOR Group, Inc.	2.0
SKF AB Sponsored ADR Class B	2.0
Littelfuse, Inc.	1.9

See Holdings Disclosure in Appendix.

Period Ending March 31, 2023. Source: FactSet, May 11, 2023.

Past performance is not indicative of future results.

Portfolio characteristics, sector analysis, and holdings exclude cash and may change at any time without notice. See Holdings Disclosure, Sector Weightings and Portfolio Characteristics in Appendix. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

PERFORMANCE ATTRIBUTION—QUARTER

CEREDEX VALUE ADVISORS®

Performance Attribution

City of Fort Pierce - Transactions vs. Russell 2000 Value
12/31/2022 to 3/31/2023
USD

				Russell 2000 Value			Variation			Attribution Analysis		
GICS Sector New	Average Weight	Total Return	Contribution to Return	Average Weight	Total Return	Contribution to Return	Average Weight	Total Return	Contribution to Return	Allocation Effect	Selection + Interaction	Total Effect
Communication Services	0.83	-12.88	-0.12	3.02	1.59	0.05	-2.18	-14.47	-0.17	-0.05	-0.11	-0.16
Consumer Discretionary	10.75	15.60	1.60	10.78	10.51	1.00	-0.03	5.09	0.60	0.01	0.49	0.50
Consumer Staples	3.00	11.26	0.32	2.68	1.16	0.04	0.33	10.10	0.28	0.01	0.28	0.30
Energy	6.74	-13.08	-0.89	6.18	0.37	-0.04	0.56	-13.45	-0.85	0.00	-0.94	-0.94
Financials	21.81	-10.63	-2.33	28.07	-10.91	-3.16	-6.26	0.29	0.82	0.68	0.15	0.83
Health Care	8.31	5.30	0.48	10.27	-6.16	-0.53	-1.96	11.46	1.01	0.14	0.95	1.10
Industrials	25.12	8.95	2.26	13.82	6.53	0.73	11.29	2.42	1.53	0.75	0.50	1.25
Information Technology	8.52	22.41	1.68	5.34	15.27	0.76	3.17	7.14	0.91	0.51	0.47	0.98
Materials	4.95	5.00	0.29	4.26	7.36	0.33	0.69	-2.36	-0.04	0.07	-0.04	0.04
Real Estate	6.90	9.39	0.47	10.70	0.51	0.08	-3.80	8.88	0.38	-0.04	0.55	0.50
Utilities	3.07	17.14	0.50	4.88	0.59	0.08	-1.81	16.55	0.43	0.04	0.48	0.51
Total	**100.00**	**4.25**	**4.25**	**100.00**	**-0.65**	**-0.65**	**0.00**	**4.91**	**4.91**	**2.12**	**2.79**	**4.91**

City of Fort Pierce - Transactions 12/31/2022 through 3/31/2023
Russell 2000 Value 1/03/2023 through 3/31/2023

Period Ending March 31, 2023. Source: FactSet, May 11, 2023.
Past performance is not indicative of future results.
Performance attribution does not incorporate the effects of cash, unclassified securities or expenses and may change at any time without notice. The total impact may not equal the difference between Portfolio and Benchmark returns. Russell 2000 Value is an unmanaged index which is comprised of the securities in the Russell 2000 Index, as defined by Russell Investment Group, with a less-than-average growth orientation. Companies in this index generally have low price-to-book and price-to-earnings ratios. Investors cannot invest directly in an index. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

PERFORMANCE ATTRIBUTION—ANNUAL

CEREDEX VALUE ADVISORS®

Performance Attribution

City of Fort Pierce - Transactions vs. Russell 2000 Value
3/31/2022 to 3/31/2023
USD

				Russell 2000 Value			Variation			Attribution Analysis		
GICS Sector New	Average Weight	Total Return	Contribution to Return	Average Weight	Total Return	Contribution to Return	Average Weight	Total Return	Contribution to Return	Allocation Effect	Selection + Interaction	Total Effect
[Unassigned]	0.00	0.00	0.00	0.11	-5.79	-0.01	-0.11	5.79	0.01	0.00	0.00	0.00
Communication Services	1.43	8.48	0.11	3.10	-38.91	-1.51	-1.68	47.39	1.62	0.42	1.00	1.42
Consumer Discretionary	9.99	28.39	2.80	9.48	-6.64	-0.17	0.51	35.03	2.97	-0.06	2.90	2.85
Consumer Staples	3.62	13.84	0.16	2.83	-5.94	-0.14	0.79	19.77	0.30	0.14	0.52	0.65
Energy	5.59	-9.77	-0.94	6.89	12.25	-0.20	-1.30	-22.01	-0.74	-0.13	-1.28	-1.41
Financials	23.19	-9.84	-1.64	27.94	-17.28	-4.60	-4.75	7.44	2.96	0.60	1.94	2.54
Health Care	5.17	-14.31	-0.10	10.15	-24.44	-2.14	-4.98	10.13	2.04	0.55	1.24	1.79
Industrials	27.42	7.32	2.34	13.66	-4.65	-0.89	13.76	11.96	3.23	1.22	3.07	4.29
Information Technology	9.84	0.92	-0.72	5.36	-4.42	-0.18	4.48	5.34	-0.53	0.33	0.32	0.65
Materials	5.70	1.97	-0.10	4.18	-4.78	-0.22	1.52	6.75	0.12	0.08	0.70	0.78
Real Estate	5.41	-0.02	-0.02	11.10	-22.34	-2.69	-5.70	22.32	2.68	0.74	0.86	1.61
Utilities	2.64	-5.26	-0.23	5.19	-3.10	-0.19	-2.55	-2.16	-0.04	-0.36	-0.20	-0.56
Total	**100.00**	**1.67**	**1.67**	**100.00**	**-12.94**	**-12.94**	**0.00**	**14.61**	**14.61**	**3.54**	**11.07**	**14.61**

City of Fort Pierce - Transactions 3/31/2022 through 3/31/2023
Russell 2000 Value 4/01/2022 through 3/31/2023

Period Ending March 31, 2023. Source: FactSet, May 11, 2023.
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Performance attribution does not incorporate the effects of cash, unclassified securities or expenses and may change at any time without notice. The total impact may not equal the difference between Portfolio and Benchmark returns. Russell 2000 Value is an unmanaged index which is comprised of the securities in the Russell 2000 Index, as defined by Russell Investment Group, with a less-than-average growth orientation. Companies in this index generally have low price-to-book and price-to-earnings ratios. Investors cannot invest directly in an index. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

CONTRIBUTION TO RETURN

City of Fort Pierce - Transactions vs. Russell 2000 Value
12/31/2022 to 3/31/2023
USD

Ticker	Security Name	Port Beginning Weight	Ending Percent of Total	Price Change (%)	Total Return	Contribution to Return
Top 5						
ASO	Academy Sports and Outdoors, Inc.	2.39	3.17	24.17	24.34	0.57
SKFRY	SKF AB Sponsored ADR Class B	1.54	1.99	28.82	33.63	0.49
STN	Stantec Inc	2.18	2.83	21.90	22.25	0.46
DLB	Dolby Laboratories, Inc. Class A	1.96	2.49	21.11	21.51	0.41
NATI	National Instruments Corporation	1.19	0.00	44.07	44.07	0.41
Bottom 5						
PTEN	Patterson-UTI Energy, Inc.	0.00	1.05	-22.32	-21.89	-0.27
BOH	Bank of Hawaii Corp	1.06	1.04	-30.67	-30.02	-0.33
FIBK	First Interstate BancSystem, Inc. Class A	1.59	1.33	-22.81	-21.82	-0.34
SLM	SLM Corp	1.53	1.22	-25.36	-24.77	-0.35
CMA	Comerica Incorporated	1.08	0.66	-35.05	-33.99	-0.36

Holdings Data As Of
City of Fort Pierce - Transactions 12/31/2022 through 3/31/2023

Period Ending March 31, 2023. Source: FactSet, May 11, 2023.
Past performance is not indicative of future results.
There is no guarantee a specific investment strategy will be successful. The Contributors/Detractors listed do not represent all securities purchased or sold. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

PURCHASES AND SALES

City of Fort Pierce - Transactions vs. Russell 2000 Value
12/31/2022 to 3/31/2023
USD

Ticker		Port. Beginning Weight	Portfolio Ending Weight
	HELD THROUGHOUT	**86.62**	**91.52**
	BOUGHT INTRA-PERIOD	**-**	**8.48**
BDC	Belden Inc.	-	1.32
PCH	PotlatchDeltic Corporation	-	1.10
WHD	Cactus, Inc. Class A	-	1.09
COLB	Columbia Banking System, Inc.	-	1.07
SXT	Sensient Technologies Corporation	-	1.06
PTEN	Patterson-UTI Energy, Inc.	-	1.05
FWRD	Forward Air Corporation	-	1.05
PWP	Perella Weinberg Partners Class A	-	0.74
	SOLD INTRA-PERIOD	**13.38**	**-**
AAON	AAON, Inc.	0.77	-
TPX	Tempur Sealy International, Inc.	0.90	-
WTS	Watts Water Technologies, Inc. Class A	1.07	-
NATI	National Instruments Corporation	1.19	-
FL	Foot Locker, Inc.	1.38	-
ENS	EnerSys	1.62	-
TTC	Toro Company	1.66	-
FCNCA	First Citizens BancShares, Inc. Class A	2.22	-
OVV	Ovintiv Inc	2.55	-
	Total	**100.00**	**100.00**

City of Fort Pierce - Transactions 12/31/2022 through 3/31/2023

Period Ending March 31, 2023. Source: FactSet, May 11, 2023.
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TOP 10 HOLDINGS

CEREDEX VALUE ADVISORS®

SECURITY	DESCRIPTION
Perrigo Co. Plc	Perrigo Co. Plc engages in the provision of self-care products and over-the-counter (OTC) health and wellness solutions. It enhances individual well-being by empowering consumers to proactively prevent or treat conditions that can be self-managed. It operates through the following segments: Consumer Self-Care Americas (CSCA) and Consumer Self-Care International (CSCI).
Academy Sports and Outdoors, Inc.	Academy Sports & Outdoors, Inc. owns and operates sporting goods and outdoor recreation retail stores. It offers hunting, fishing, and camping equipment and gear, sports and leisure products, footwear, and apparel. The company organizes its merchandise in four divisions: Outdoors, Sports and Recreation, Apparel and Footwear.
Stantec Inc	Stantec, Inc. engages in the provision of knowledge-based solutions through value-added professional consulting services in engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics. It operates through the following geographical segments: Canada, United States, and Global.
Ritchie Bros. Auctioneers Incorporated	Ritchie Bros. Auctioneers, Inc. is an industrial auctioneer, which engages in the sale of equipment to on-site and online bidders. It operates through the following segments: Auctions and Marketplaces, Ritchie Bros. Financial Services and Mascus. The Auctions and Marketplaces segment consists of live on site auctions, online auctions and marketplaces, and brokerage service.
Power Integrations, Inc.	Power Integrations, Inc. designs and develops mixed-signal integrated circuits and other electronic components and circuitry used in high-voltage power conversion. Its products include AC-DC Conversion, LED Drivers, Gate Drivers, Motor Drivers, and Automotive Solutions. The company was founded by Klas Eklund, Art Fury and Steven J.
Dolby Laboratories, Inc. Class	Dolby Laboratories, Inc. engages in the provision of audio and imaging technologies. It transforms entertainment and communications for content playback in movies, television, music, and gaming. Its products include Cinema Imaging Products, Cinema Audio Products, and other products such as 3-D kits, broadcast hardware and software, monitors, and solutions for hearing impaired consumers.
DENTSPLY SIRONA, Inc.	Dentsply Sirona, Inc. engages in the design, manufacture, sales and distribution of professional dental products and technologies. It operates through the following segments: Technologies and Equipment and Consumables. The Technologies and Equipment segments comprises dental technology, equipment and healthcare consumable products such as dental implants, laboratory dental products, computer-aided design and computer-aided manufacturing systems, imaging systems, treatment centers and consumable medical device products.
EMCOR Group, Inc.	EMCOR Group, Inc. engages in the provision of electrical and mechanical construction, and facilities services. It operates through the following segments: United States Electrical Construction and Facilities Services, United States Mechanical Construction and Facilities Services, United States Building Services, United States Industrial Services, and United Kingdom Building Services.
SKF AB Sponsored ADR Class B	SKF AB engages in the manufacture of machine and rotating equipment. It operates through the Industrial and Automotive segments. The Industrial segment comprises of Industrial Sales Americas, Industrial Sales Europe and Middle East and Africa, Industrial Sales Asia, Industrial Units, Bearing Operations, and Aerospace.
Littelfuse, Inc.	Littelfuse, Inc. engages in the manufacture of technologies in circuit protection, power control and sensing. It operates through the following segments: Electronics, Transportation, and Industrial. The Electronics segment covers a broad range of end markets, including industrial motor drives and power conversion, automotive electronics, electric vehicle and related infrastructure, power supplies, data centers and telecommunications, medical devices, alternative energy and energy storage, building and home automation, appliances, and mobile electronics.

Period Ending March 31, 2023. Source: FactSet, May 11, 2023.

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PORTFOLIO HOLDINGS

CEREDEX VALUE ADVISORS®

Units	Security	Unit Cost	Book Value	Price	Market Value	Alloc.
City of Fort Pierce, Florida Retirement and Benefit System			**$ 7,064,337.92**		**$ 7,434,797.13**	**100.00%**
Currency			**$ 211,554.12**		**$ 211,554.12**	**2.85%**
211,554	US DOLLAR	$ 1.00	$ 211,554.12	$	$ 211,554.12	2.85%
Common Stock			**$ 6,852,783.80**		**$ 7,223,243.01**	**97.15%**
COMMUNICATION SERVICES			**$ 47,221.90**		**$ 47,908.00**	**0.64%**
1,400	SCHOLASTIC CORP	$ 33.73	$ 47,221.90	$ 34.22	$ 47,908.00	0.64%
CONSUMER DISCRETIONARY			**$ 607,542.15**		**$ 707,728.75**	**9.52%**
3,500	ACADEMY SPORTS & OUTDOORS INC	$ 39.27	$ 137,436.21	$ 65.25	$ 228,672.00	3.08%
900	AUTOLIV INC	$ 81.63	$ 73,463.29	$ 93.36	$ 84,024.00	1.13%
1,200	CARTER'S INC	$ 101.23	$ 121,479.16	$ 71.92	$ 86,304.00	1.16%
500	CHOICE HOTELS INTERNATIONAL INC	$ 120.08	$ 60,038.32	$ 117.19	$ 58,738.75	0.79%
1,200	INTERCONTINENTAL HOTELS GROUP	$ 53.58	$ 64,290.68	$ 66.60	$ 81,054.00	1.09%
1,200	SIGNET JEWELERS LTD	$ 60.77	$ 72,921.02	$ 77.78	$ 93,336.00	1.26%
2,100	STEVEN MADDEN LTD	$ 37.10	$ 77,913.47	$ 36.00	$ 75,600.00	1.02%
CONSUMER STAPLES			**$ 244,112.75**		**$ 232,579.50**	**3.13%**
1,900	ANDERSONS INC/THE	$ 38.67	$ 73,464.40	$ 41.32	$ 78,859.50	1.06%
3,400	ENERGIZER HOLDINGS INC	$ 39.00	$ 132,604.10	$ 34.70	$ 117,980.00	1.59%
500	PRICESMART INC	$ 76.09	$ 38,044.25	$ 71.48	$ 35,740.00	0.48%
ENERGY			**$ 544,223.88**		**$ 500,476.00**	**6.73%**
1,900	CACTUS INC	$ 49.75	$ 94,519.00	$ 41.23	$ 78,337.00	1.05%
3,600	CHAMPIONX CORP	$ 22.42	$ 80,701.01	$ 27.13	$ 97,668.00	1.31%
2,900	KINETIK HOLDINGS INC	$ 31.86	$ 92,383.22	$ 31.30	$ 90,770.00	1.22%
4,100	NOV INC	$ 19.78	$ 81,104.08	$ 18.51	$ 75,891.00	1.02%
6,500	PATTERSON-UTI ENERGY INC	$ 14.65	$ 95,233.74	$ 11.70	$ 76,050.00	1.02%
3,200	WORLD FUEL SERVICES CORP	$ 31.34	$ 100,282.83	$ 25.55	$ 81,760.00	1.10%
FINANCIALS			**$ 1,512,130.98**		**$ 1,460,434.72**	**19.64%**
500	AMERICAN FINANCIAL GROUP INC/OH	$ 124.87	$ 62,433.82	$ 121.50	$ 60,750.00	0.82%
1,400	AMERIS BANCORP	$ 30.92	$ 43,289.61	$ 36.58	$ 51,422.00	0.69%
600	AMERISAFE INC	$ 60.88	$ 36,528.94	$ 48.95	$ 29,370.00	0.40%
1,434	BANK OF HAWAII CORP	$ 53.32	$ 76,459.81	$ 52.08	$ 74,682.72	1.00%
2,200	CATHAY GENERAL BANCORP	$ 37.09	$ 81,606.26	$ 34.52	$ 75,944.00	1.02%
3,600	COLUMBIA BANKING SYSTEM INC	$ 21.18	$ 76,247.76	$ 21.42	$ 77,112.00	1.04%
1,100	COMERICA INC	$ 70.78	$ 77,858.11	$ 43.42	$ 48,543.00	0.65%
800	CULLEN/FROST BANKERS INC	$ 116.98	$ 93,583.00	$ 105.34	$ 84,272.00	1.13%
400	EVERCORE INC	$ 34.72	$ 13,888.43	$ 115.38	$ 46,152.00	0.62%

Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023.

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PORTFOLIO HOLDINGS

CEREDEX VALUE ADVISORS®

	Units	Security	Unit Cost	Book Value	Price	Market Value	Alloc.
	3,300	FIRST HAWAIIAN INC	$ 24.78	$ 81,777.50	$ 20.63	$ 68,079.00	0.92%
	3,200	FIRST INTERSTATE BANCSYSTEM INC	$ 37.71	$ 120,676.00	$ 29.86	$ 95,552.00	1.29%
	6,800	FNB CORP/PA	$ 11.94	$ 81,182.96	$ 11.60	$ 78,880.00	1.06%
	1,900	HORACE MANN EDUCATORS CORP	$ 27.77	$ 52,759.68	$ 33.48	$ 63,612.00	0.86%
	200	KINSALE CAPITAL GROUP INC	$ 271.76	$ 54,352.91	$ 300.15	$ 60,030.00	0.81%
	5,900	PERELLA WEINBERG PARTNERS	$ 10.92	$ 64,415.23	$ 9.10	$ 53,690.00	0.72%
	500	REINSURANCE GROUP OF AMERICA INC	$ 114.44	$ 57,219.42	$ 132.76	$ 66,380.00	0.89%
	500	RLI CORP	$ 115.39	$ 57,695.33	$ 132.91	$ 66,455.00	0.89%
	3,100	SEACOAST BANKING CORP OF FLORIDA	$ 32.98	$ 102,223.44	$ 23.70	$ 73,470.00	0.99%
	2,200	SEI INVESTMENTS CO	$ 60.07	$ 132,148.22	$ 57.55	$ 126,610.00	1.70%
	7,100	SLM CORP	$ 11.39	$ 80,884.53	$ 12.39	$ 87,969.00	1.18%
	1,000	VOYA FINANCIAL INC	$ 64.90	$ 64,900.02	$ 71.46	$ 71,460.00	0.96%
HEALTH CARE				**$ 633,714.39**		**$ 651,609.00**	**8.76%**
	4,200	DENTSPLY SIRONA INC	$ 31.60	$ 132,717.94	$ 39.28	$ 165,564.00	2.23%
	500	LEMAITRE VASCULAR INC	$ 45.03	$ 22,514.57	$ 51.47	$ 25,735.00	0.35%
	3,200	ORGANON & CO	$ 23.60	$ 75,510.85	$ 23.52	$ 75,264.00	1.01%
	4,200	PATTERSON COS INC	$ 31.24	$ 131,205.49	$ 26.77	$ 112,434.00	1.51%
	7,600	PERRIGO CO PLC	$ 35.76	$ 271,765.54	$ 35.87	$ 272,612.00	3.67%
INDUSTRIALS				**$ 1,523,748.35**		**$ 1,748,374.89**	**23.52%**
	1,500	A O SMITH CORP	$ 58.37	$ 87,551.62	$ 69.15	$ 103,725.00	1.40%
	900	AGCO CORP	$ 133.21	$ 119,890.45	$ 135.20	$ 121,680.00	1.64%
	1,400	ARMSTRONG WORLD INDUSTRIES INC	$ 91.41	$ 127,967.85	$ 71.24	$ 99,736.00	1.34%
	1,200	BWX TECHNOLOGIES INC	$ 52.38	$ 62,853.01	$ 63.04	$ 75,648.00	1.02%
	400	CURTISS-WRIGHT CORP	$ 152.16	$ 60,864.28	$ 176.26	$ 70,580.00	0.95%
	900	EMCOR GROUP INC	$ 89.43	$ 80,482.91	$ 162.59	$ 146,331.00	1.97%
	700	FORWARD AIR CORP	$ 101.77	$ 71,239.06	$ 107.76	$ 75,432.00	1.01%
	1,500	GENPACT LTD	$ 44.76	$ 67,137.20	$ 46.22	$ 69,330.00	0.93%
	5,800	INTERFACE INC	$ 12.79	$ 74,203.28	$ 8.12	$ 47,154.00	0.63%
	1,700	KBR INC	$ 42.74	$ 72,659.77	$ 55.05	$ 93,814.50	1.26%
	1,100	MATTHEWS INTERNATIONAL CORP	$ 32.12	$ 35,329.16	$ 36.06	$ 39,666.00	0.53%
	1,200	OWENS CORNING	$ 87.37	$ 104,839.95	$ 95.80	$ 115,584.00	1.55%
	3,500	RITCHIE BROS AUCTIONEERS INC	$ 54.24	$ 189,839.74	$ 56.29	$ 197,015.00	2.65%
	700	SCIENCE APPLICATIONS INTERNATIONAL	$ 90.81	$ 63,565.45	$ 107.46	$ 75,222.00	1.01%
	7,300	SKF AB	$ 17.13	$ 125,032.16	$ 19.67	$ 148,541.90	2.00%
	3,500	STANTEC INC	$ 35.57	$ 124,502.61	$ 58.41	$ 204,939.49	2.76%

Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023.

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PORTFOLIO HOLDINGS

CEREDEX VALUE ADVISORS®

	Units	Security	Unit Cost	Book Value	Price	Market Value	Alloc.
	200	VALMONT INDUSTRIES INC	$ 278.95	$ 55,789.85	$ 319.28	$ 63,976.00	0.86%
INFORMATION TECHNOLOGY				**$ 505,802.18**		**$ 682,158.40**	**9.18%**
	1,100	BELDEN INC	$ 88.87	$ 97,759.89	$ 86.77	$ 95,502.00	1.28%
	2,100	DOLBY LABORATORIES INC	$ 73.43	$ 154,194.02	$ 85.42	$ 179,382.00	2.41%
	500	LITTELFUSE INC	$ 179.94	$ 89,967.61	$ 268.09	$ 134,045.00	1.80%
	2,210	POWER INTEGRATIONS INC	$ 42.65	$ 94,250.34	$ 84.64	$ 187,054.40	2.52%
	1,500	PROGRESS SOFTWARE CORP	$ 46.42	$ 69,630.32	$ 57.45	$ 86,175.00	1.16%
MATERIALS				**$ 406,840.39**		**$ 394,114.00**	**5.30%**
	700	APTARGROUP INC	$ 105.73	$ 74,010.12	$ 118.19	$ 82,733.00	1.11%
	700	ASHLAND INC	$ 72.83	$ 50,979.12	$ 102.71	$ 71,897.00	0.97%
	1,600	AVIENT CORP	$ 48.45	$ 77,524.24	$ 41.16	$ 66,252.00	0.89%
	1,600	MINERALS TECHNOLOGIES INC	$ 81.34	$ 130,138.58	$ 60.42	$ 96,672.00	1.30%
	1,000	SENSIENT TECHNOLOGIES CORP	$ 74.19	$ 74,188.33	$ 76.56	$ 76,560.00	1.03%
REAL ESTATE				**$ 549,013.82**		**$ 537,291.50**	**7.23%**
	1,200	COLLIERS INTERNATIONAL GROUP INC	$ 108.89	$ 130,665.44	$ 105.55	$ 126,660.00	1.70%
	500	FIRSTSERVICE CORP	$ 119.99	$ 59,992.56	$ 140.99	$ 70,607.50	0.95%
	1,200	LAMAR ADVERTISING CO	$ 88.31	$ 105,969.73	$ 99.89	$ 119,868.00	1.61%
	8,100	NEWMARK GROUP INC	$ 10.91	$ 88,365.94	$ 7.08	$ 57,348.00	0.77%
	5,600	PHYSICIANS REALTY TRUST	$ 15.60	$ 87,383.82	$ 14.93	$ 83,608.00	1.12%
	1,600	POTLATCHDELTIC CORP	$ 47.90	$ 76,636.33	$ 49.50	$ 79,200.00	1.07%
UTILITIES				**$ 278,433.01**		**$ 260,568.25**	**3.50%**
	12,500	ALGONQUIN POWER & UTILITIES CORP	$ 10.13	$ 126,583.93	$ 8.40	$ 106,356.25	1.43%
	2,700	ATLANTICA SUSTAINABLE INFRASTRUCTURE	$ 29.45	$ 79,505.10	$ 29.56	$ 79,812.00	1.07%
	3,100	VISTRA CORP	$ 23.34	$ 72,343.98	$ 24.00	$ 74,400.00	1.00%

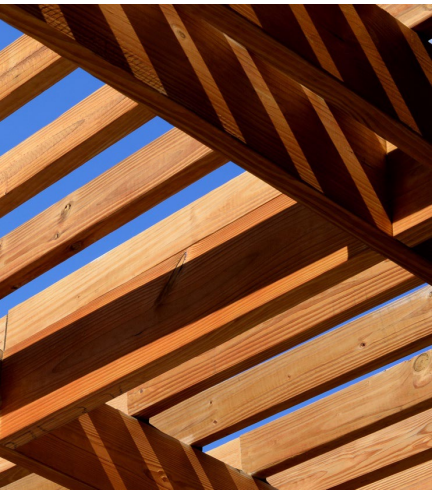
Period Ending March 31, 2023. Source: Eagle Investment Systems, May 11, 2023.

Past performance is not indicative of future results.

Data subject to change. See Holding Disclosure in Appendix. This perspective was prepared for City of Fort Pierce, Florida Retirement and Benefit System specific one-on-one presentation.

PARTNERING WITH CEREDEX

Competitive long-term performance and an exceptional record of talent retention



- A well-designed, well-defined fundamental value proposition and approach
- Resilient and relevant value strategies, time tested over multiple market cycles
- Consistently managed by one highly stable and experienced investment team

Past performance is not indicative of future results.



APPENDIX

PORTFOLIO MANAGERS



Mills Riddick, CFA

Large Cap Value Portfolio Manager,
Chief Investment Officer

As Ceredex Value Advisors' chief investment officer, Mills Riddick is responsible for the overall investment policy of the firm's value equity portfolios. In addition, he holds the role of portfolio manager of the Ceredex Large Cap Value Equity strategy since 1995.

Mr. Riddick joined Ceredex in 1989 through a predecessor of its former parent firm, Trusco Capital Management. He started in a lead client service role with portfolio management responsibilities, including for the Large Cap Value strategy. In 1995, he was named sole portfolio manager of the strategy and head of the Value Equity Team. Mr. Riddick has been instrumental in crafting the firm's investment philosophy, assembling the value equity investment team, and leading the transition to Ceredex becoming an independently managed firm in 2008.

Mr. Riddick began his financial career in 1980, joining Peat Marwick as a certified public accountant. He began his investment career as a financial consultant with Bache in 1982.

Mr. Riddick graduated *cum laude* from Florida State University with a B.S. in accounting, and achieved the Certified Public Accountant (CPA) designation in 1981. He is a Chartered Financial Analyst (CFA®) charterholder since 1992. He has worked in investment management since 1982.



Jennifer W. Graff, CFA

Large Cap Value Portfolio Manager

Jennifer Graff, CFA, is managing director and portfolio manager at Ceredex Value Advisors. She serves as a portfolio manager of the firm's Large Cap Value and Concentrated Large Cap Value Equity strategies.

In 2001, Ms. Graff joined Trusco Capital Management, Ceredex Value Advisors' predecessor firm, as research analyst covering the industrial and materials sectors. Ms. Graff earned a B.A. in psychology from the University of Central Florida. She has been a Chartered Financial Analyst (CFA®) charterholder since 2003.



Don Wordell, CFA

Mid-Cap Value, Small Cap Value Portfolio Manager

Don Wordell is a managing director and portfolio manager with Ceredex Value Advisors, an affiliate of Virtus Investment Partners. His primary responsibilities are managing the Ceredex Mid-Cap Value Equity, Concentrated SMID Cap Value Equity, and Ceredex Small Cap Value Equity strategies.

Mr. Wordell has been with Ceredex since 1996, starting with its predecessor firm, STI Capital Management, as a research analyst covering value equity strategies. He was appointed portfolio manager of the Mid-Cap Value Equity strategy in 2001 and portfolio manager of the Small Cap Value Equity strategy in 2023.

Mr. Wordell is a graduate of the University of Central Florida, where he earned both a B.S. in finance and an M.B.A. He is a Chartered Financial Analyst (CFA®) charterholder since 2004. He began working in investment management in 1996.



Brett Barner, CFA

Small Cap Value Portfolio Manager

Brett Barner is a managing director and portfolio manager with Ceredex Value Advisors. He has sole management responsibility for the Ceredex Small Cap Value Equity strategy since 1995.

Mr. Barner started with Ceredex in 1990, initially working for a predecessor of its former parent firm, Trusco Capital Management, as a client portfolio manager and equity analyst. In 1995, he was named portfolio manager of the Small Cap Value strategy.

Prior to joining the firm, Mr. Barner was a financial consultant for Drexel Burnham and Shearson Lehman Brothers, managing client portfolios.

Mr. Barner graduated *cum laude* from the University of Central Florida, earning a B.S. in business administration with a concentration in finance. He is a Chartered Financial Analyst (CFA®) charterholder since 1993. He has worked in investment management since 1985.

PORTFOLIO MANAGERS



Charles E. Carter, CFA

Small Cap Value Portfolio Manager and Senior Research Analyst, Consumer Staples & Consumer Discretionary

Charles Carter is a managing director, portfolio manager, and senior research analyst at Ceredex Value Advisors, an affiliate of Virtus Investment Partners. His primary responsibilities include managing the Ceredex Small Cap Value Equity strategy and covering the consumer discretionary and consumer staples sectors.

Mr. Carter has been with Ceredex since 2004, initially starting with its predecessor firm, Trusco Capital Management. Previously, he was manager of investor relations at CNL Income Corp., a real estate holding company. He began his investment career at Credit Suisse First Boston as a sell-side equity research associate covering the media industry.

Mr. Carter earned a B.S. in management from Georgia Institute of Technology. He is a Chartered Financial Analyst (CFA®) charterholder since 2006.



Cody Smith, CFA

Mid-Cap Value Portfolio Manager and Senior Research Analyst, Healthcare & Technology

Cody Smith is a managing director, portfolio manager, and senior research analyst at Ceredex Value Advisors, an affiliate of Virtus Investment Partners. His primary responsibilities include managing the Ceredex Mid-Cap Value Equity and Concentrated SMID Cap Value Equity strategies and covering the healthcare and technology sectors.

Mr. Smith joined Ceredex in 2007, initially starting with its predecessor firm, Trusco Capital Management. He began his investment career in 2004, working as a research analyst at Piper Jaffrey covering the medical device sector.

Mr. Smith is a graduate of Drake University with a B.S.B.A. in finance and a minor in mathematics. He is a Chartered Financial Analyst (CFA®) charterholder since 2009.

RESEARCH ANALYSTS



Jason E. Fraser, CFA

Research Analyst, Client Portfolio Manager
Risk Control
Financials & Telecom

Jason Fraser is a director and senior research analyst with Ceredex Value Advisors. He is responsible for covering the financials and telecommunication sectors.

Prior to joining Ceredex in 2011, Mr. Fraser worked at Raymond James as a senior research associate covering several sectors including telecom.

Mr. Fraser is a graduate of the University of Florida with a B.S. in finance and a graduate of the Johns Hopkins University with an M.S. in Applied Economics. He is a Chartered Financial Analyst (CFA®) charterholder since 2008.



Hein Hanekom, CFA

Research Analyst
Technology & Utilities

Hein Hanekom is a director and research analyst with Ceredex Value Advisors. He is responsible for covering the technology and utilities sectors.

Mr. Hanekom joined Ceredex in 2007, initially starting with a predecessor of its former parent firm, Trusco Capital Management. Prior to joining the firm, Mr. Hanekom was a financial consultant at Wachovia Securities.

Mr. Hanekom earned a B.S. in finance from Western Carolina University and an M.B.A. from the University of Central Florida. He is a Chartered Financial Analyst (CFA®) charterholder since 2012.



David Maynard

Research Analyst
Industrials

David Maynard is a director and research analyst with Ceredex Value Advisors. He is responsible for a variety of industrial verticals, including multi-industry, electrical equipment, industrial automation, flow control, aerospace & defense, airlines, machinery, engineering & construction, heavy building materials, industrial gases, and office furniture, among others.

Prior to joining Ceredex in 2014, Mr. Maynard worked at Barclays as an associate within the Global Industrials Group.

Mr. Maynard earned a B.A. in economics and mathematics from Vanderbilt University and an M.B.A. from the University of Virginia. He began his investment career in 2014.



Casey D. Johnson

Research Analyst
Energy & Materials

Casey Johnson is a director and research analyst with Ceredex Value Advisors. He is responsible for coverage of the energy and materials sector.

Prior to joining Ceredex in 2020, Mr. Johnson was director of investment strategy and a senior portfolio manager at WaterOak Advisors, an independent wealth management firm. From 2000 to 2019, he held a series of successive research positions at institutional value manager DePrince, Race & Zollo, most recently as the director of research, and previously as senior equity research analyst, equity research analyst, and research assistant (summer intern).

Mr. Johnson earned a B.A. in economics from University of Notre Dame and an M.B.A. with a concentration in finance and management from Rollins College Crummer Graduate School. He began his full-time investment career in 2003.

RESEARCH ANALYSTS



George Enstad, CFA

Research Analyst
Financials

George Enstad is a director and research analyst at Ceredex Value Advisors. He has primary responsibility for covering the financials sector.

Prior to joining Ceredex in 2022, Mr. Enstad served as a portfolio manager at Bank of America Private Bank, a role he held since 2020. He began his investment career in 2010, holding various analytical and investment roles at Bank of America's Chief Investment Office, Bank of America Merrill Lynch, and Morgan Stanley.

Mr. Enstad earned a B.S. in agricultural economics from the University of Florida and an MBA in finance from Rollins Crummer Graduate School of Business. He is a Chartered Financial Analyst (CFA®) charterholder since 2016.



Meghan Civiello, CFA

Research Analyst
Equity

Meghan Civiello is a director and research analyst at Ceredex Value Advisors.

Prior to joining Ceredex in 2023, Ms. Civiello served as an equity analyst/director at F.L. Putnam Investment Management, a role she held since 2019. She began her investment career in 2006, serving in various analytical and banking roles at HM Payson, Bank of America, Westfield Capital Management, and Cambridge Associates.

Ms. Civiello earned a B.A. in history from Colby College and an MBA in finance from MIT Sloan School of Management. She is a Chartered Financial Analyst (CFA®) charterholder since 2013.

CLIENT INVESTMENT OFFICERS



Steve Loncar

Client Portfolio Manager

Steve Loncar is a managing director and client portfolio manager with Ceredex Value Advisors. Mr. Loncar's primary responsibility is to ensure that Ceredex clients, prospects, consultants, and internal partners have current information on the firm's strategies. In addition, he participates in new business initiatives, reviews and analyzes investment strategies, and contributes to the firm's overall sales and marketing efforts.

Mr. Loncar joined Ceredex in 1997, initially starting as a portfolio administrator with a predecessor of its former parent firm, Trusco Capital Management. During his tenure with the firm, he has held several positions, including performance analyst, equity analyst for a mid-cap equity fund and the classic value team, and director of the key account-financial intermediary team.

Mr. Loncar is a graduate of Florida State University with a B.S. in Finance, and is an M.B.A. graduate from Rollins College. He began his career in the investment industry in 1997.



Sarah Thompson

Portfolio Administrator

Sarah Thompson is a director and portfolio administrator with Ceredex Value Advisors. In this role, she is actively engaged in client service, marketing, sales, and business operations for the firm's value equity strategies.

Ms. Thompson joined Ceredex in 2001, initially starting as a portfolio accountant with a predecessor of its former parent firm, Trusco Capital Management. She was promoted to portfolio assistant in 2002, with responsibilities for both equity and fixed income strategies before transitioning to her current role in 2007. Prior to joining Ceredex, she began her career as an agency analyst with Conseco.

Ms. Thompson is a graduate of Purdue University where she earned a B.A. in psychology/business.

GLOSSARY

Active Position
Absolute portfolio weight minus the benchmark portfolio weight.

Active Share
Percentage of stock holdings in a manager's portfolio that differs from the benchmark index.

Dividend Yield
Dividend divided by price that shows how much a company pays out in dividends each year relative to its stock price.

Enterprise Value (EV)
Measures a company's total value. Looks at entire market value rather than just equity value, all ownership interests and asset claims from both debt and equity are included.

EBITDA
Earnings before interest, taxes, depreciation, and amortization.

EV/EBITDA (FY1)
Metric used as a valuation tool to compare the value of a company, debt included, to the company's cash earnings less non-cash expenses. It's ideal for analysts and investors looking to compare companies within the same industry.

EV/Sales (FY1)
A valuation measure that compares the enterprise value of a company to its annual sales. A quantifiable metric of how to value a company based on its sales, while taking account of both the company's equity and debt.

Free Cash Flow Yield
Cash flow from operations for a particular year less capital expenditures divided by the diluted weighted average shares outstanding for that fiscal year.
Free cash flow per share for the current fiscal year divided by current stock price.
.

GLOSSARY

Market Capitalization
The total dollar value of all outstanding shares. It is calculated by multiplying the number of shares outstanding by the current price of one share.

Operating Margin
Operating income divided by revenues, expressed as a percentage.

Price to Sales Ratio (P/S)
A stock's capitalization divided by its sales over a trailing 12 months. The value is the same whether the calculation is done for the whole company or a per-share basis.

Price to Earnings (FY1 Est)
The ratio for valuing a company that measures its current share price relative to its per-share earnings. Sometimes known as the price multiple or the earnings multiple. Estimated on a forward projected basis.

Return on Assets (ROA)
An indicator of how profitable a company is relative to its total assets.

Return on Equity (ROE)
Equal to a fiscal year's after-tax income (after preferred stock dividends but before common stock dividends) divided by book value, expressed as a percentage.

Tracking Error
Tracking error is the standard deviation of the difference between the periodic total returns of a portfolio of stocks and those of a benchmark. An estimated tracking error estimates the likelihood that a portfolio will outperform or underperform its benchmark by a certain amount or more at the end of a specified period.
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DISCLOSURES

CEREDEX VALUE ADVISORS®

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It is important to receive and review the statement you receive from your custodian. Any client account report provided by our Firm is not intended to replace your custody statement, which should be considered your official record for all pertinent account information. And while our Firm's reports are provided in a different format from the custodian's, and may vary in content and scope, you should compare the asset information to that of your custody statement. Please notify us promptly if you do not receive statements on all accounts from the custodian on at least a quarterly basis.

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INDEXES REFERENCED

Russell 1000® Value: Is an unmanaged index which is comprised of the securities in the Russell 1000® Index, as defined by Russell Investment Group, with less-than-average growth orientation. Companies in this index generally have low price-to-book and price-to-earnings ratios, higher dividend yields, and lower forecasted growth values.

Russell Midcap® Value: Is an unmanaged index which measures the performance of those securities found in the Russell Midcap universe, as defined by Russell Investment Group, with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000® Value Index.

Russell 2000® Value: Is an unmanaged index which is comprised of the securities in the Russell 2000® Index, as defined by Russell Investment Group, with a less-than-average growth orientation. Companies in this index generally have low price-to-book and price-to-earnings ratios.

The Russell 2500™: Is a market capitalization-weighted index of the 2,500 smallest companies in the Russell Universe, which comprises the 3,000 largest U.S. companies. The index is calculated on a total return basis with dividends reinvested. The index is unmanaged, its returns do not reflect any fees, expenses, or sales charges, and is not available for direct investment.

Investors cannot invest directly in an index.

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Fees have a compounding effect on cumulative results. For example, assume the account achieves a 10% annual return prior to the deduction of fees each year for a period of ten years. If an annual fee of 0.5% of assets under management were charged each of the ten years, the resulting annual average return net of fees would be reduced to 9.48%.

eA Large Cap Value: US Equity products that invest primarily in large capitalization stocks with fundamental characteristics showing high earnings growth expectations or in fast growing economic sectors. The expected benchmarks for this universe would include Russell 1000® Value, S&P 500®, or the S&P/BARRA Value.

eA Mid-Cap Value: US Equity Products that invest primarily in mid capitalization stocks with fundamental characteristics showing high earnings growth expectations or in fast growing economic sectors. The expected benchmarks for this universe would include Russell Midcap® Value, Russell Midcap®, or the S&P 400®.

eA Small Cap Value: US Equity products that invest primarily in small capitalization stocks with fundamental characteristics showing them to be underpriced or in slower growing economic sectors. The expected benchmarks for this universe would include Russell 2000® or the Russell 2000® Value.

INVESTMENT RISKS

All investments involve risk. Equity securities (stocks) may be more volatile and carry more risk than other forms of investments. Value-based investments are subject to the risk that the broad market may not recognize their intrinsic value. Dividends reflect past performance and there is no guarantee they will continue to be paid. Mid- and small-capitalization stocks typically carry additional risks since smaller companies generally have a higher risk of failure. Securities of mid-cap companies may be more volatile and less liquid than the securities of large-cap companies. There is no guarantee a specific investment strategy will be successful. Individual investors are advised to consult with their investment professional about their specific financial needs and goals before making any investment decisions.

SECTOR WEIGHTINGS AND PORTFOLIO CHARACTERISTICS

The sector weightings and portfolio characteristics are presented as of the date shown on this presentation, and may change without notice.

INVESTMENT PROCESS, STRATEGIES AND PROCEDURES

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CITY OF FORT PIERCE
RETIREMENT AND BENEFIT SYSTEM
FINANCIAL REPORT
February 28, 2023

	February 28, 2022		February 28, 2023		
Beginning Market Balance		**246,661,634**		**198,590,004**	*
Plus Income:					
Investments Earnings	1,353,210		1,063,418		
Unrealized Gains on Investments	(2,423,271)		17,258,136		
Total Investments		(1,070,060)		18,321,554	
Employer Contributions	2,138,495		2,467,862		
Employee Contributions	763,932		813,631		
Total Contributions		2,902,427		3,281,493	
Total Receipts		**1,832,367**		**21,603,047**	
Less Expenses:					
Investment Expenses	247,372		257,552		
Professional Fees	14,897		26,421		
Administrative Expenses	113,614		82,635		
Member Refunds	129,241		130,253		
Retiree Benefits	6,665,733		7,145,816		
Total Expenses		**7,170,858**		**7,642,678**	
Ending Market Balance		**241,323,143**		**212,550,373**	
	*Unaudited		*Unaudited		