

CalPERS

Monthly Update – Investment Compliance

MONTH ENDED MAY 31, 2017

CalPERS Monthly Update – Investment Compliance

For the month ended May 31, 2017

Items Completed Under Delegated Authority

Disclosure of Placement Agent Fees

Investment Proposal Activity

Policy Exceptions

Disclosure of Closed Session Action Items

Investment Transactions

Items Completed Under Delegated Authority *(for the month ended May 31, 2017)*

| Program Area | | Name of Investment | Commitment (million) | Initial Funding Date | Complies with Delegation Number |
|----------------|---|--------------------|----------------------|----------------------|---------------------------------|
| Global Equity | CalPERS-managed U.S. Domestic Total Market Index 3000 Custom strategy | | \$1,080.00 | Dec-1991 | INV-16-04 |
| Global Equity | CalPERS-managed International Equity Index strategy | | \$675.00 | May-2005 | INV-16-04 |
| Global Equity | CalPERS-Emerging Market Index strategy | | \$175.00 | Oct-2008 | INV-16-04 |
| Global Equity | CalPERS-managed Developed Market Small Cap Index strategy | | \$75.00 | Aug-2008 | INV-16-04 |
| Private Equity | CVC Capital Partners VII, L.P. | | € 500.00 | May-2017 | INV-16-06 |

Disclosure of Placement Agent Fees *(for the month ended May 31, 2017)*

| | |
|--|---|
| Firm Name | CVC Capital Partners VII Limited |
| Asset Class | Private Equity |
| Fund | CVC Capital Partners VII |
| Placement Agent / Firm | Marc St John, Partner, CVC Investor Relations Team, CVC Funding, LLC Robert Squire, Partner, CVC Investor Relations Team, CVC Funding, LLC Clay Shumway, Managing Director, CVC Investor Relations Team, CVC Funding, LLC John Bryant, Managing Director, CVC Investor Relations Team, CVC Capital Partners Limited |
| Placement Agent Employment | Internal Employees of the General Partner and/or its affiliates |
| Registered with U.S. or non-U.S. financial regulatory authority | Robert Squire, Clay Shumway and John Bryant are employed by CVC Funding LLC, which is registered with FINRA as a limited-purpose broker-dealer and is the entity which has been appointed by CVC Capital Partners VII Limited to act as a distributor for CVC Capital Partners Fund VII in the United States. CVC Capital Partners Advisory (US) Inc. is a registered investment adviser with the SEC and an affiliate of the entity (CVC Capital Partners Limited) which employs Marc St John. |
| Registered Lobbyist(s) | All the above named Placement Agents are registered as lobbyists in the State of California. Robert Squire and Marc St John are also registered as lobbyists in New York City. John Bryant and Robert Squire are registered as lobbyists in the County of San Diego. Robert Squire and Clay Shumway are registered as lobbyists in the City of Los Angeles. Robert Squire, Clay Shumway and Marc St John are all registered as lobbyists in the County of Los Angeles. |
| Estimated Placement Agent Compensation | Each individual is working as a Placement Agent as part of their role in Investor Relations at CVC. Approximately \$12,500 has been spent in discussions with CalPERS between 1 October 2016 and 31 March 2017. Each individual is entitled to a salary and a discretionary bonus based on their own performance and that of CVC. While a Placement Agent may also be awarded a bonus in connection with a CalPERS investment any such bonus is entirely discretionary and may take into consideration other factors. |
| Disclosed Campaign Gifts and Contributions | None |
| Notes | The original disclosure has been updated to reflect those individuals within the CVC investor relations team who have been acting as a placement agent to CalPERS in relation to Fund VII to date and those members of the team who are registered as lobbyists in the State of California and therefore may do so in the future. |
| Transaction Type | New |

Disclosure of Placement Agent Fees *(for the month ended May 31, 2017)*

| | |
|--|---|
| Firm Name | The Carlyle Group |
| Asset Class | Private Equity |
| Fund | Carlyle Asia Partners III |
| Placement Agent / Firm | Lee Carson, Carlyle Internal Sales Personnel |
| Placement Agent Employment | Internal Employee of the General Partner and/or its affiliates |
| Registered with U.S. or non-U.S. financial regulatory authority | TCG Securities, L.L.C., an affiliate of the Carlyle Group, is a limited purpose broker/dealer registered with the U.S. Securities and Exchange Commission and member of the Financial Industry Regulatory Authority("FINRA"). TCG Securities acts as a private placement agent based on a "best efforts" basis with respect to the offer and sale of interests in affiliated funds. |
| Registered Lobbyist(s) | Lee Carson is a Managing Director - Investor Relations and is a registered lobbyist in the state of California. He is affiliated with TCG Securities, L.L.C., which is an affiliate of the Carlyle Group. |
| Estimated Placement Agent Compensation | Mr. Carson has been a registered lobbyist in California since December 2010 and as such, he does not receive compensation that is contingent upon a CalPERS commitment. In accordance with his registered lobbyist status, TCG Securities files quarterly California State Lobbying Questionnaires for In-House Placement Agents. Carlyle Asia Partners III IAC members were engaged to approve an extension of the Follow-on Investment Period for Cap III. Mr. Carson spent no time on this whatsoever, but did invest 1 hour in the process of completing the PAD, which equates to approximately \$121 of compensation given Mr. Carson's \$250,000.00 annual salary. |
| Disclosed Campaign Gifts and Contributions | None |
| Notes | None |
| Transaction Type | Amendment |

Investment Proposal Activity (for the month ended May 31, 2017)

| | Private Equity | Forestland | Infrastructure | Real Estate | Global Equities | Commodities | Global Fixed Income | Total |
|-----------------------------------|----------------|------------|----------------|-------------|-----------------|-------------|---------------------|-------|
| Start of Month Proposals | 16 | 1 | 9 | 9 | 7 | 1 | 3 | 46 |
| New Proposals During the Month | 8 | 1 | 4 | 12 | 7 | 0 | 1 | 33 |
| Reinstated Proposals During Month | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Decisions During the Month | 6 | 1 | 9 | 9 | 7 | 1 | 3 | 36 |
| End of Month Proposals | 18 | 1 | 4 | 12 | 7 | 0 | 1 | 43 |

Status Details

| Status | Private Asset Classes | | | | Public Asset Classes | | | Total |
|--|-----------------------|------------|----------------|-------------|----------------------|-------------|---------------------|-----------|
| | Private Equity | Forestland | Infrastructure | Real Estate | Global Equities | Commodities | Global Fixed Income | |
| Start of Month Proposals | | | | | | | | |
| Submitted | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 5 |
| Screening | 5 | 1 | 7 | 9 | 6 | 1 | 3 | 32 |
| Due Diligence | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 8 |
| Approved | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Subtotal | 16 | 1 | 9 | 9 | 7 | 1 | 3 | 46 |
| New Proposals During the Month | | | | | | | | |
| Subtotal | 8 | 1 | 4 | 12 | 7 | 0 | 1 | 33 |
| Reinstated Proposals During Month | | | | | | | | |
| Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Decisions During the Month | | | | | | | | |
| Committed | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Declined | 4 | 1 | 7 | 8 | 0 | 1 | 3 | 24 |
| Failed to Materialize | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 5 |
| Referred | 1 | 0 | 1 | 1 | 3 | 0 | 0 | 6 |
| Subtotal | 6 | 1 | 9 | 9 | 7 | 1 | 3 | 36 |
| End of Month Proposals | | | | | | | | |
| Submitted | 6 | 0 | 0 | 1 | 0 | 0 | 1 | 8 |
| Screening | 5 | 1 | 3 | 11 | 7 | 0 | 0 | 27 |
| Due Diligence | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| Approved | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Subtotal | 18 | 1 | 4 | 12 | 7 | 0 | 1 | 43 |

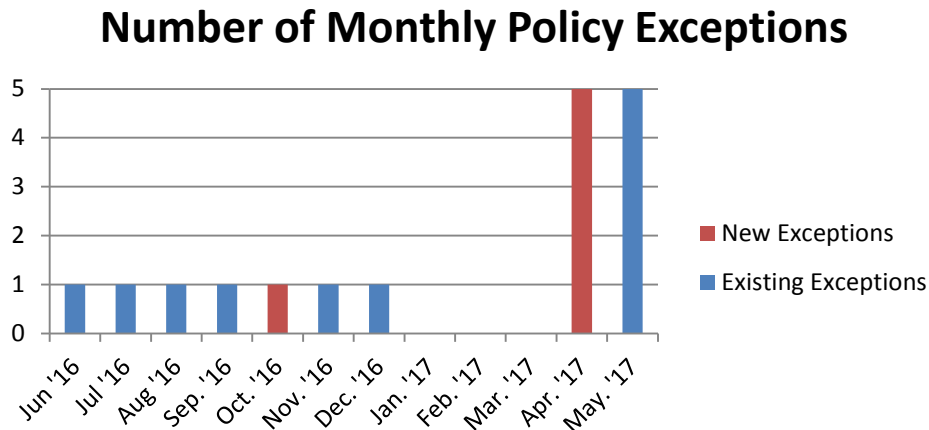
Start of Month proposals for Private Equity (16) were revised downwards from April (17) due to Duplicate/Outdated Proposals.

Policy Exceptions *(for the month ended May 31, 2017)*

Material Exceptions to Policy

According to policy requirements, the following is a summary of investment policy exceptions as reported by the Investment Office program areas. The following program areas had no exceptions to report for the month:

- o Global Equity
- o Global Fixed Income
- o Investment Manager Engagement Programs
- o Investment Risk and Performance
- o Investment Servicing Division
- o Private Equity
- o Sustainable Investment Program
- o Trust Level Portfolio Management



Policy Exceptions (for the month ended May 31, 2017)

New:

| Program Area or Asset Class | Event Date | Resolution Date | Policy | Exception Description | Event Description and Resolution (expected) or Next Steps |
|-----------------------------|------------|-----------------|--------|-----------------------|---|
| No items to report | | | | | |

Existing:

| Program Area or Asset Class | Event Date | Resolution Date | Policy | Exception Description | Event Description and Resolution (expected) or Next Steps |
|-----------------------------|------------|-----------------|---|---|--|
| Real Assets | 1/1/2017 | TBD | Investment Policy for Real Assets Program | For the beginning of the Q1'17 reporting period, the "Core" risk classification represented 74.6% of the Real Assets Program, which is slightly below the policy range of 75-100% for this risk classification. | <p>The new Real Assets Program Investment Policy (RA Policy) went into effect 1/1/17. New policy parameters included the consistent application of risk classifications, geographic ranges, and leverage limits across the Real Assets Program and to each of its constituent portfolios. Given the illiquid nature of the RA portfolio, staff anticipates a lag time to make the asset shifts required to bring the portfolio in line with the new strategic plan and policy ranges, along with the required updates to systems and processes as noted to the Investment Committee (IC) at the August, 2016 IC meeting.</p> <p>The most recently available RA Program data is for Q4'16. Given that 12/31/16 ending balances became 1/1/17 starting balances, the Core RA NAV was not within the new RA Policy range as of the date it took effect (1/1/17). For reporting purposes, moreover, RA staff is making the conservative assumption that this exception would not have been cured by the end of Q1'17 due to the illiquid nature of the RA investments.</p> <p>This slight underweight to core is a necessary consequence of implementing consistent risk classifications across RA, and is expected to be resolved within 2-4 quarters given the RA strategy focus on core assets.</p> |

Policy Exceptions (for the month ended May 31, 2017)

Existing: (cont'd)

| Program Area or Asset Class | Event Date | Resolution Date | Policy | Exception Description | Event Description and Resolution (expected) or Next Steps |
|-----------------------------|------------|-----------------|---|--|---|
| Real Assets | 1/1/2017 | TBD | Investment Policy for Real Assets Program | For the beginning of the Q1'17 reporting period, the "Core" risk classification represented 44.7% of the Forestland portfolio, which is below the policy range of 75-100% for this risk classification of the Forestland portfolio. | <p>The new RA Policy went into effect 1/1/17. New policy parameters included the consistent application of risk classifications, geographic ranges, and leverage limits across the Real Assets Program and to each of its constituent portfolios. Given the illiquid nature of the RA portfolio, staff anticipates a lag time to make the asset shifts required to bring the portfolio in line with the new strategic plan and policy ranges, along with the required updates to systems and processes as noted to the Investment Committee (IC) at the August, 2016 IC meeting.</p> <p>The most recently available RA Program data is for Q4'16. Given that 12/31/16 ending balances became 1/1/17 starting balances, the Core Forestland NAV was not within the new RA Policy range as of the date it took effect (1/1/17). For reporting purposes, moreover, RA staff is making the conservative assumption that this exception would not have been cured by the end of Q1'17 due to the illiquid nature of the Forestland investments.</p> <p>The timing of any resolution remains uncertain.</p> |
| Real Assets | 1/1/2017 | TBD | Investment Policy for Real Assets Program | For the beginning of the Q1'17 reporting period, the "Value-Add" risk classification represented 39.0% of the Forestland portfolio, which is above the policy range of 0-25% for this risk classification within the Forestland portfolio. | <p>The new RA Policy went into effect 1/1/17. New policy parameters included the consistent application of risk classifications, geographic ranges, and leverage limits across the Real Assets Program and to each of its constituent portfolios. Given the illiquid nature of the RA portfolio, staff anticipates a lag time to make the asset shifts required to bring the portfolio in line with the new strategic plan and policy, along with the required updates to systems and processes as noted to the Investment Committee (IC) at the August, 2016 IC meeting.</p> <p>The most recently available RA Program data is for Q4'16. Given that 12/31/16 ending balances became 1/1/17 starting balances, the Value-Added Forestland NAV was not within the new RA Policy range as of the date it took effect (1/1/17). For reporting purposes, moreover, RA staff is making the conservative assumption that this exception would not have been cured by the end of Q1'17 due to the illiquid nature of the Forestland investments.</p> <p>The timing of any resolution remains uncertain.</p> |

Policy Exceptions (for the month ended May 31, 2017)

Existing: (cont'd)

| Program Area or Asset Class | Event Date | Resolution Date | Policy | Exception Description | Event Description and Resolution (expected) or Next Steps |
|-----------------------------|------------|-----------------|---|---|--|
| Real Assets | 1/1/2017 | TBD | Investment Policy for Real Assets Program | For the beginning of the Q1'17 reporting period, International Emerging Markets represented 16.3% of the Forestland portfolio, which is above the permitted policy range of 0-15% for this geography segment within the Forestland portfolio. | <p>The new RA Policy went into effect 1/1/17. New policy parameters included the consistent application of risk classifications, geographic ranges, and leverage limits across the Real Assets Program and to each of its constituent portfolios. Given the illiquid nature of the RA portfolio, staff anticipates a lag time to make the asset shifts required to bring the portfolio in line with the new strategic plan and policy, along with the required updates to systems and processes as noted to the Investment Committee (IC) at the August, 2016 IC meeting.</p> <p>The most recently available RA Program data is for Q4'16. Given that 12/31/16 ending balances became 1/1/17 starting balances, the International Emerging Markets Forestland NAV was not within the new RA Policy range as of the date it took effect (1/1/17). For reporting purposes, moreover, RA staff is making the conservative assumption that this exception would not have been cured by the end of Q1'17 due to the illiquid nature of the Forestland investments.</p> <p>The timing of any resolution remains uncertain.</p> |
| Real Assets | 1/1/2017 | TBD | Investment Policy for Real Assets Program | For the beginning of the Q1'17 reporting period, DSCR for the Forestland portfolio was 0.97, which is below the minimum DSCR of 1.25, as required by the new RA Policy. | <p>The new RA Policy went into effect 1/1/17. New policy parameters included the consistent application of risk classifications, geographic ranges, and leverage limits across the Real Assets Program and to each of its constituent portfolios. Given the illiquid nature of the RA portfolio, staff anticipates a lag time to make the asset shifts required to bring the portfolio in line with the new strategic plan and policy, along with the required updates to systems and processes as noted to the Investment Committee (IC) at the August, 2016 IC meeting.</p> <p>The most recently available RA Program data is for Q4'16. Given that 12/31/16 ending balances became 1/1/17 starting balances, the Forestland portfolio DSCR did not meet the required minimum DSCR for that portfolio as of the date the new RA Policy took effect (1/1/17). For reporting purposes, moreover, RA staff is making the conservative assumption that this exception would not have been cured by the end of Q1'17.</p> <p>The timing of any resolution remains uncertain.</p> |

Disclosure of Closed Session Action Items (for the month ended May 31, 2017)

| Investment Committee Meeting | Agenda Item | Investment Committee Action | Vote | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|---|--|------------------|------|-----------------|-----|------------------|-----|-------------|----|-----------------------|-----|-------------|-----|----------------|----|-------------|----|----------|-----|-------------|-----|--------------|-----|----------------|-----|-------------|----|
| May 15, 2017 | Closed Item 4a Action - Senate Bill 185 (de Leon) Update | <p><u>Action:</u> The Committee directed staff to divest from 14 thermal coal companies that met the criteria for divestment as specified by Senate Bill 185, the Public Divestiture of Thermal Coal Companies Act (the Act), and to restrict future investments in those companies as well as an additional eight companies where CalPERS had no holdings.</p> <p><u>Summary of Debate:</u> The Committee discussed the requirements of the Act, investment risk and return characteristics of the targeted companies, as well as the economic implications of divestment on the portfolio.</p> <p>The Committee considered the following:</p> <ul style="list-style-type: none"> • Three companies had indicated plans to adapt their business models in consideration of clean energy generation (such as through a reduction of thermal coal mining revenues), and were exempt from the divestment requirement of the Act • 14 companies failed to indicate any applicable business plan adaptations, or failed to respond to CalPERS engagement efforts and were subject to divestment per the requirements of the Act • CalPERS has no holdings to divest from an additional eight thermal coal companies as defined in the Act • Whether its fiduciary duties precluded it from divesting from the 14 companies subject to divestment per the requirements of the Act. | <p>Roll call vote results are listed below :</p> <table border="1"> <thead> <tr> <th data-bbox="1425 379 1696 408">Committee Member</th> <th data-bbox="1696 379 1821 408">Vote</th> </tr> </thead> <tbody> <tr> <td data-bbox="1425 408 1696 436">Michael Bilbrey</td> <td data-bbox="1696 408 1821 436">Yes</td> </tr> <tr> <td data-bbox="1425 436 1696 465">Richard Costigan</td> <td data-bbox="1696 436 1821 465">Yes</td> </tr> <tr> <td data-bbox="1425 465 1696 494">Rob Feckner</td> <td data-bbox="1696 465 1821 494">No</td> </tr> <tr> <td data-bbox="1425 494 1696 522">Jeree Glasser-Hedrick</td> <td data-bbox="1696 494 1821 522">Yes</td> </tr> <tr> <td data-bbox="1425 522 1696 551">Katie Hagen</td> <td data-bbox="1696 522 1821 551">Yes</td> </tr> <tr> <td data-bbox="1425 551 1696 579">Dana Hollinger</td> <td data-bbox="1696 551 1821 579">No</td> </tr> <tr> <td data-bbox="1425 579 1696 608">JJ Jelincic</td> <td data-bbox="1696 579 1821 608">No</td> </tr> <tr> <td data-bbox="1425 608 1696 636">Ron Lind</td> <td data-bbox="1696 608 1821 636">Yes</td> </tr> <tr> <td data-bbox="1425 636 1696 665">Lynn Paquin</td> <td data-bbox="1696 636 1821 665">Yes</td> </tr> <tr> <td data-bbox="1425 665 1696 694">Priya Mathur</td> <td data-bbox="1696 665 1821 694">Yes</td> </tr> <tr> <td data-bbox="1425 694 1696 722">Theresa Taylor</td> <td data-bbox="1696 694 1821 722">Yes</td> </tr> <tr> <td data-bbox="1425 722 1696 751">Bill Slaton</td> <td data-bbox="1696 722 1821 751">No</td> </tr> </tbody> </table> | Committee Member | Vote | Michael Bilbrey | Yes | Richard Costigan | Yes | Rob Feckner | No | Jeree Glasser-Hedrick | Yes | Katie Hagen | Yes | Dana Hollinger | No | JJ Jelincic | No | Ron Lind | Yes | Lynn Paquin | Yes | Priya Mathur | Yes | Theresa Taylor | Yes | Bill Slaton | No |
| Committee Member | Vote | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Michael Bilbrey | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Richard Costigan | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rob Feckner | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jeree Glasser-Hedrick | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Katie Hagen | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dana Hollinger | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| JJ Jelincic | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ron Lind | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lynn Paquin | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Priya Mathur | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Theresa Taylor | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bill Slaton | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Investment Transactions (for the month ended May 31, 2017)

| Total Fund - Public Markets | | | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-------------|-----------------|---------------|
| | Public Equity | Income | Inflation | ARS | Liquidity | MAC |
| Beginning Market Value | 152,218,962,704 | 58,860,358,340 | 28,845,649,419 | 289,394,812 | 15,711,121,130 | 1,270,541,000 |
| + Purchases | 3,918,965,690 | 4,850,318,381 | 929,655,275 | 0 | 644,550,000 | 0 |
| - Sales | (7,564,899,261) | (4,320,385,184) | (1,012,629,698) | (2,146,017) | (1,021,709,000) | 0 |
| + Unitized Fund Purchases | 0 | 0 | 0 | | 0 | 0 |
| - Unitized Fund Sales | 0 | 0 | 0 | | 0 | 0 |
| +/- Other Changes in MV | 6,519,756,074 | 222,515,275 | (3,191,179,125) | 481,740 | (222,661,421) | 7,322,950 |
| Ending Market Value | 155,092,785,206 | 59,612,806,812 | 25,571,495,871 | 287,730,536 | 15,111,300,709 | 1,277,863,950 |

| Total Fund - Private Markets | | | | |
|------------------------------|----------------|----------------|---------------|----------------|
| | Private Equity | Real Estate | Forestland | Infrastructure |
| Beginning Market Value | 25,898,847,691 | 30,132,107,686 | 1,992,311,851 | 3,690,429,312 |
| + Contributions | 196,124,579 | 265,983,851 | 0 | 41,298,067 |
| - Distributions | (575,864,555) | (233,146,641) | 0 | (17,998,592) |
| + Unitized Fund Purchases | 0 | 0 | 0 | 0 |
| - Unitized Fund Sales | 0 | 0 | 0 | 0 |
| +/- Other Changes in MV | 660,494,727 | (32,837,210) | 0 | (23,299,475) |
| Ending Market Value | 26,179,602,442 | 30,132,107,686 | 1,992,311,851 | 3,690,429,312 |

| | Total Public Markets | Total Private Markets | Total Fund |
|---------------------------|----------------------|-----------------------|------------------|
| Beginning Market Value | 257,196,027,406 | 61,713,696,541 | 318,909,723,946 |
| + Contributions | 10,343,489,346 | 503,406,497 | 10,846,895,843 |
| - Distributions | (13,921,769,160) | (827,009,788) | (14,748,778,948) |
| + Unitized Fund Purchases | 0 | 0 | 0 |
| - Unitized Fund Sales | 0 | 0 | 0 |
| +/- Other Changes in MV | 3,336,235,494 | 604,358,042 | 3,940,593,536 |
| Ending Market Value | 256,953,983,085 | 61,994,451,292 | 318,948,434,376 |

Note: Numbers will not tie exactly to the Asset Allocation/Performance categories due to classification differences.