

AGENDA



Date: July 7, 2017

The regular meeting of the Dallas Police and Fire Pension System Board of Trustees will be held at **8:30 a.m. on Thursday, July 13, 2017, in the Second Floor Board Room at 4100 Harry Hines Boulevard, Dallas, Texas.** Items of the following agenda will be presented to the Board:

A. MOMENT OF SILENCE

B. CONSENT AGENDA

1. Approval of Minutes

Regular meeting of June 8, 2017

2. Approval of Refunds of Contributions for the Month of June 2017

3. Approval of Activity in the Deferred Retirement Option Plan (DROP) for July 2017

4. Approval of Estate Settlements

- 5. Approval of Survivor Benefits**
- 6. Approval of Service Retirements**
- 7. Approval of Alternate Payee Benefits**
- 8. Approval of Earnings Test**
- 9. Approval of Payment of Military Leave Contributions**

C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

- 1. Welcome of newly-appointed and re-appointed Trustees**
- 2. January 1, 2017 actuarial valuation**
- 3. 2016 audit**
- 4. HB 3158 transition update**
- 5. 2016 Comprehensive Annual Financial Report**
- 6. Emerging Markets equity manager search**

- 7. Emerging Markets debt manager search**
- 8. Deferred Retirement Option Plan (DROP) annuitization rollovers**
- 9. Violation of federal law (USERRA) by the City of Dallas**
- 10. Legal issues**

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

- a.** Police Officer and Firefighter pay lawsuits
- b.** Potential claims involving fiduciaries and advisors
- c.** Eddington et al. v. DPF
- d.** Rawlings v. DPF
- e.** DPF v. Columbus A. Alexander III
- f.** Degan et al. v. DPF (Federal suit)
- g.** City of Dallas violation of USERRA
- h.** Internal Revenue Service Voluntary Compliance Program

- 11. Investment reports**
- 12. 2017 Budget adjustment – Public relations**

13. Employee recognition – Second Quarter 2017

- a. Employee Service Award
- b. Employee of the Quarter award

14. Closed Session - Board serving as Medical Committee

Discussion of the following will be closed to the public under the terms of Section 551.078 of the Texas Government Code:

Disability application

15. Unforeseeable Emergency Requests from DROP Members

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.078 of the Texas Government Code.

16. Possible sale of Lone Star Investment Advisors interests

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

D. BRIEFING ITEMS

- 1. Executive Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System**

- 2. Executive Director's report**

Associations' newsletters

- NCPERS Monitor (June 2017)

The term "possible action" in the wording of any Agenda item contained herein serves as notice that the Board may, as permitted by the Texas Government Code, Section 551, in its discretion, dispose of any item by any action in the following non-exclusive list: approval, disapproval, deferral, table, take no action, and receive and file. At the discretion of the Board, items on this agenda may be considered at times other than in the order indicated in this agenda.

At any point during the consideration of the above items, the Board may go into Closed Executive Session as per Texas Government Code, Section 551.071 for consultation with attorneys, Section 551.072 for real estate matters, Section 551.074 for personnel matters, and Section 551.078 for review of medical records.



ITEM #A

MOMENT OF SILENCE

In memory of our Members and Pensioners who recently passed away

(May 26, 2017 – June 28, 2017)

NAME	ACTIVE/ RETIRED	DEPARTMENT	DATE OF DEATH
Michael G. Chambers	Retired	Fire	May 26, 2017
Dan M. Evans	Retired	Police	May 31, 2017
Charles E. Stark	Retired	Police	June 8, 2017
Donn T. Wheeler	Retired	Police	June 9, 2017
Les Wilson, Jr.	Retired	Fire	June 9, 2017
Frank Willis	Retired	Police	June 12, 2017
Edwin H. McNutt	Retired	Police	June 15, 2017
J.G. Jenkins	Retired	Fire	June 24, 2017
Harold Dawson	Retired	Fire	June 26, 2017
Richard R. Coleman	Retired	Fire	June 28, 2017
Lane L. Weible	Retired	Police	June 28, 2017

Dallas Police and Fire Pension System
Thursday, June 8, 2017
8:30 a.m.
4100 Harry Hines Blvd., Suite 100
Second Floor Board Room
Dallas, TX

Regular meeting, Samuel L. Friar, Chairman, presiding:

ROLL CALL

Board Members

Present at 8:30 Samuel L. Friar, Kenneth S. Haben, Brian Hass, Tho T. Ho, Larry D. Williams, Clint Conway, Kenneth Sprecher
Present at 8:34 Jennifer S. Gates
Present at 8:36 Erik Wilson
Present at 8:40 Philip T. Kingston
Present at 9:13 Scott Griggs

Absent: Joseph P. Schutz

Staff

Kelly Gottschalk, Josh Mond, Summer Loveland, John Holt, Damion Hervey, Pat McGennis, Ryan Wagner, Milissa Romero, Greg Irlbeck, Linda Rickley, Cynthia Thomas

Others

Chuck Campbell, John Turner, Ben Mesches, David Harper, Rhett Humphreys, Michael Yang, Keith Stronkowsky, John Kolb, Stuart Turner, Rick Bodio (by telephone), Bryce Brunsting (by telephone), Todd Rosa (by telephone), Michael Marzouk, Michael Spitler, Ed Stewart, Dan Wojcik, Paul Jarvis, W. C. Robison, J. M. Dunn, Chris Harry, H. Holland, Joel Lavender, Rick Salinas, William Paris, Aaron Anderson, Salvador Morales, Holly Powell, Steve Alexander, Sal Rios, Bryan Titsworth, Zaman Hemani, Chris Kang, Wally Guerra, Ashley Bae, Tristan Hallman, Amanda Bonneau, Jack Fink, Barry Blonstein, Ken Kalthoff, Lyle Downy, Brett Shipp, Ivory Taylor II

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The meeting was called to order at 8:30 a.m.

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**Regular Board Meeting
Thursday, June 8, 2017**

A. MOMENT OF SILENCE

The Board observed a moment of silence in memory of retired police officers, Truly M. Holmes, Carl E. Lowe, Ernest J. Smith, and retired firefighters, Leslie L. Warnock, Homer W. Foster, Robert L. Phillips, Arthur Green.

No motion was made.

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B. BOARD OF TRUSTEES

1. Welcome of newly-elected and re-elected Trustees

Ms. Gottschalk stated that DFPF conducted an election from March 27 through April 6, 2017, to fill the expiring terms of four Trustee positions. The Board certified the results of the election for Police Pensioner Trustee Place 1 and Fire Pensioner Trustee Place 1 at the regular meeting of the Board on April 13, 2017. The candidates for Police Trustee Place 1 and Fire Trustee Place 1 were unopposed in their respective positions and were therefore, deemed elected.

The following newly elected and re-elected Trustees completed the Oath of Office form for the term that began on June 1, 2017 and will end on August 31, 2017:

Police Trustee Place 1 (P-1)

Kenneth Haben

Fire Trustee Place 1 (F-1)

Samuel Friar

Police Pensioner Place 1

Kenneth Sprecher

Fire Pensioner Place 1

Larry D. Williams

No motion was made.

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2. Election of officers of the Board of Trustees for June 1, 2017 through August 31, 2017

Ms. Gottschalk stated that in accordance with Section 3.01(f) of the Plan Document, the Board will elect from among its Trustees a Chairman, a Vice Chairman and a Deputy Vice Chairman for the period June 1, 2017 through August 31, 2017.

**Regular Board Meeting
Thursday, June 8, 2017**

2. Election of officers of the Board of Trustees for June 1, 2017 through August 31, 2017 (continued)

After discussion, Mr. Haben made a motion to re-elect the current slate of officers of the Board of Trustees for June 1, 2017 through August 31, 2017, as follows:

- Chairman – Sam Friar
- Vice Chairman – Ken Haben
- Deputy Vice Chairman – Joe Schutz

Mr. Hass seconded the motion, which was unanimously approved by the Board. Ms. Gates and Messrs. Griggs, Kingston, and Wilson were not present for the vote.

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3. Authorized signatories for the Board of Trustees

No action was taken regarding Signature Authorization Forms, since the previous officers were re-elected for the new term.

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4. Committees of the Board

Chairman Friar appointed Larry Williams to the Audit Committee and the Governance Committee, leaving all other previous appointments unchanged. The committee appointments for June 1, 2017 through August 31, 2017, are as follows:

Standing Committees:

<u>Audit Committee</u>	<u>Professional Services Committee</u>	<u>Investment Advisory Committee</u>
Jennifer Gates, Chair	Ken Haben, Chair	Pending
Sam Friar	Sam Friar	
Ken Sprecher	Scott Griggs	
Larry Williams	Brian Hass	

Ad Hoc Committee:

- Governance Committee**
- Joe Schutz, Chair
- Scott Griggs
- Ken Haben
- Brian Hass
- Philip Kingston
- Larry Williams

**Regular Board Meeting
Thursday, June 8, 2017**

4. Committees of the Board (continued)

After discussion, Mr. Haben made a motion to approve the Chairman's committee appointments. Mr. Hass seconded the motion, which was unanimously approved by the Board. Messrs. Griggs, Kingston, and Wilson were not present for the vote.

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C. CONSENT AGENDA

1. Approval of Minutes

- a. Regular meeting of May 11, 2017
- b. Special meeting of May 17, 2017
- c. Special meeting of May 22, 2017

2. Approval of Refunds of Contributions for the Month of May 2017

3. Approval of Activity in the Deferred Retirement Option Plan (DROP) for June 2017

4. Approval of Estate Settlements

5. Approval of Survivor Benefits

6. Approval of Service Retirements

7. Approval of Earnings Test

8. Denial of Unforeseen Emergency Requests

9. Approval of Alternate Payee Benefits

After discussion, Mr. Haben made a motion to approve the items on the Consent Agenda, subject to the final approval of the staff. Mr. Hass seconded the motion, which was unanimously approved by the Board. Messrs. Griggs, Kingston, and Wilson were not present for the vote.

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**Regular Board Meeting
Thursday, June 8, 2017**

D. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. DPFP plan legislation

The staff updated the Board on the status of the DPFP plan legislation.

No motion was made.

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2. Consideration of possible Deferred Retirement Option Plan (DROP) account distributions in accordance with DROP Policy Addendum and possible changes to DROP Policy Addendum

- a. Possible changes to DROP Policy Addendum
- b. Certification of reserve amount
- c. Certification of excess liquidity amount
- d. Determination of distribution amount

In the light of the Governor signing HB 3158 into law, staff proposed possible changes to the DROP Policy Addendum.

The Board went into closed executive session – legal at 8:55 a.m.

The meeting was reopened at 9:05 a.m.

After discussion, Mr. Kingston made a motion to adopt the proposed amendment to the DROP Policy Addendum. Mr. Wilson seconded the motion, which was unanimously approved by the Board. Mr. Griggs was not present for the vote.

No discussion was held on Items 2b., 2c., or 2d.

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3. Possible sales of real estate interests in Napa County, California

Rhett Humphreys and Michael Yang, of NEPC, John Kolb and Stuart Turner, of Barings Real Estate Advisors, and Rick Bodio, of Hancock Agricultural Investment Group (by telephone), discussed the potential sale of DPFP’s real estate interests in Napa County, California, with the Board and staff.

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3. Possible sales of real estate interests in Napa County, California (continued)

Aetna Springs and Lake Luciana are two related resort/golf/residential development projects containing in total approximately 3,100 acres located in the Pope Valley area of Napa County, CA. Barings Real Estate Advisors, formerly Cornerstone, was engaged by the Board in July 2015 to manage DPFPP's interests in the projects. DPFPP's holdings consist of a membership interest in Lake Luciana, LLC as well as direct ownership of various lots. The projects were previously managed by staff. Criswell Radovan was previously employed by Lake Luciana, LLC to assist in the operation of the projects. In May 2016, the Board authorized Barings to market the two projects for sale.

Iron Corral is a 420-acre parcel with approximately 140-acres of commercial vineyard and additional plantable acreage adjacent to the Lake Luciana project. This asset is directly owned by DPFPP and was originally managed by staff, overseeing the development and operations of the vineyard land. In March 2015, the Board approved the transfer of Iron Corral to DPFPP's agricultural portfolio managed by Hancock. This asset has been marketed in conjunction with the Aetna Springs and Lake Luciana projects due to its close proximity to the two projects.

Barings and Hancock discussed the marketing process and provided a recommended course of action.

The Board went into closed executive session – real estate at 9:51 a.m.

The meeting was reopened at 10:40 a.m.

After discussion, Mr. Kingston made a motion to authorize Barings Real Estate Advisors and Hancock Agricultural Investment Management Group to consummate the sale of DPFPP's real estate interests in Napa County, California, subject to the final approval of terms by the Executive Director. Mr. Wilson seconded the motion, which was unanimously approved by the Board.

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4. Hearthstone: Possible sale of 11.6 acres in Eagle, Idaho

Bryce Brunsting and Todd Rosa, of Hearthstone (by telephone), and Rhett Humphreys and Michael Yang, of NEPC, discussed the potential sale of two lots in Eagle, Idaho totaling 11.6 acres. These properties are adjacent to the Spring Valley property, which is also part of Project Holdings, LLC; however, these lots

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4. Hearthstone: Possible sale of 11.6 acres in Eagle, Idaho (continued)

are unrelated to the Spring Valley proposed development. Hearthstone took over management of Project Holdings from CDK in February 2015.

The Board went into closed executive session – real estate at 9:51 a.m.

The meeting was reopened at 10:40 a.m.

After discussion, Mr. Haben made a motion to authorize Hearthstone to consummate the sale of the two lots in Eagle, Idaho, subject to the final approval of terms by the Executive Director. Mr. Wilson seconded the motion, which was unanimously approved by the Board.

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5. CDK Multifamily Fund

The Board went into closed executive session – real estate at 9:51 a.m.

The meeting was reopened at 10:40 a.m.

No motion was made.

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The meeting was recessed at 9:44 a.m.

The meeting was reconvened at 9:50 a.m.

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6. Bank loan manager search

After researching the managers on NEPC’s Bank Loan Focus Placement List, staff recommended engaging Pacific Asset Management as a bank loan manager to redeploy excess cash and to build out the Bank Loans sub-asset allocation of the Fixed Income portfolio. NEPC concurred with this recommendation.

Rhett Humphreys and Keith Stronkowsky, of NEPC, and Michael Marzouk and Michael Spitler, of Pacific Asset Management (PAM), were present to discuss their bank loan strategy with the Board.

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6. Bank loan manager search (continued)

After discussion, Mr. Kingston made a motion to approve an initial investment of up to \$50 million to the Pacific Asset Management Bank Loan strategy within DPFPP's Bank Loans sub-asset allocation of the Fixed Income asset class, with authority to increase the investment as permitted by the Investment Policy Statement. Mr. Conway seconded the motion, which was unanimously approved by the Board.

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7. NEPC

- a. First Quarter 2017 Investment Performance Analysis
- b. Fourth Quarter 2016 Private Markets & Real Assets Review

Messres. Humphreys, Stronkowsky, and Yang presented the above NEPC reports.

No motion was made.

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8. Violation of federal law (USERRA) by the City of Dallas

At the May 11, 2017 Board meeting, the staff briefed the Board on the failure of the City of Dallas to make contributions to DPFPP required under the Uniform Services Employment and Reemployment Rights Act (USERRA). The Board directed staff to contact the City Manager concerning this matter and to bring a recommendation to the Board at the June 8, 2017 meeting regarding a law firm to potentially engage in this matter. Staff provided an update to the Board.

The Board provided further direction to the staff regarding how to address the City's continuing failure to make the required pension contributions for military service time buy-back under the USERRA federal law. The Board directed staff to continue attempting to meet with the City Manager and his legal counsel to ascertain why the City refuses to pay these contributions.

Councilmember Trustees requested that staff provide them with additional documentation on correspondence with City staff so that they may discuss the issue with them.

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9. Legal issues

- a. Police Officer and Firefighter pay lawsuits
- b. Potential claims involving fiduciaries and advisors
- c. Eddington et al. v. DPF
- d. Rawlings v. DPF
- e. DPF v. Columbus A. Alexander III
- f. Degan et al. v. DPF (Federal suit)
- g. DPF plan legislation
- h. City of Dallas violation of USERRA
- i. Open records litigation

The Board went into a closed executive session – legal at 12:05 p.m., which included all Trustees present at the meeting.

The meeting was reopened at 12:42 p.m.

No motion was made.

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The meeting was recessed at 12:43 p.m.

The meeting was reconvened at 12:48 p.m.

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10. Investment reports

The staff reviewed the investment performance and rebalancing reports for the period ending May 31, 2017 with the Board.

No motion was made.

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11. 2016 audit status

The staff updated the Board on the status and findings to date related to the 2016 financial statement audit.

No motion was made.

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Thursday, June 8, 2017**

12. Service Credit Repurchases Prior to September 1, 2017

Ms. Gottschalk stated that under HB 3158 which becomes effective on September 1, 2017, members will have certain retirement rights if they have 20 years of service as of September 1, 2017, which will not be available without 20 years of service on that date. In particular, members may be able to retire or enter DROP with a benefit of 90% of the member's average computation pay (i.e. maximum benefit) prior to reaching age 58 if they have 20 years of service as of September 1, 2017.

There are approximately 15 members who may be able to reach 20 years of service as of September 1, 2017 if they buy service which is available for repurchase. The new board will have the authority to interpret the new Plan to decide whether such members would be deemed to have 20 years of service prior to September 1, 2017 for time purchased after September 1, 2017, but relating to periods prior to September 1, 2017. However, if members wait until after September 1, 2017, the new board may determine that only service actually purchased prior to September 1, 2017 qualifies in the calculation of whether the member has 20 years of service as of such date.

Ms. Gottschalk stated that staff will reach out to these potentially affected members individually to advise them of the situation.

No motion was made.

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13. Possible revisions to Education and Travel Policy and Procedure

The staff proposed a change to the policy and procedure covering education and travel related expenses to address the Board's approval of attendance of Trustees.

At the May 11, 2017 Board meeting, the Board approved changes to the Education and Travel Policy and Procedure which require the Board to approve plans for education and travel expenses in advance of attendance at the educational conferences or training sessions taking place. Therefore, a listing of upcoming Trustee attendance should be presented as a separate agenda item rather than as a component of the Executive Director's Report to allow for the Board to take action on the item. The proposed changes address the removal of the listing of planned attendance from the Executive Director's Report.

After discussion, Mr. Haben made a motion to approve the Education and Travel Policy and Procedure as amended. Mr. Hass seconded the motion, which was unanimously approved by the Board.

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14. Board approval of Trustee education and travel

- a. Future Education and Business Related Travel
 - b. Future Investment Related Travel
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- a. Per the Education and Travel Policy and Procedure, planned Trustee education and business related travel and education which does not involve travel requires Board approval prior to attendance. No attendance was requested to be approved.
 - b. Per the Investment Policy Statement, planned Trustee travel related to investment monitoring, and in exceptional cases, due diligence, requires Board approval prior to attendance. There is no future investment related travel for Trustees at this time.

After discussion, Mr. Griggs made a motion to approve no further travel during the current Board's tenure, which ends on August 31, 2017. Ms. Gates seconded the motion, which was approved by the following vote:

For: Griggs, Gates, Kingston, Sprecher, Wilson, Hass, Friar
Against: Haben, Ho, Williams, Conway

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15. Board Members' reports on meetings, seminars and/or conferences attended

Reports were given on the following meetings. Those who attended are listed.

- a. NCPERS 2017 Annual Conference & Exhibition – Mr. Haben
Mr. Haben
- b. PRB: MET Online Core Training: Actuarial Matters
Mr. Williams
- c. PRB: MET Online Core Training: Benefits Administration
Mr. Williams

**Regular Board Meeting
Thursday, June 8, 2017**

15. Board Members' reports on meetings, seminars and/or conferences attended (continued)

- d. PRB: MET Online Core Training: Risk Management

Mr. Williams

- e. PRB: MET Online Core Training: Ethics

Mr. Williams

- f. PRB: MET Online Core Training: Governance

Mr. Williams

No motion was made.

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16. Unforeseeable Emergency Requests from DROP Members

There were no Unforeseeable Emergency Requests from DROP members requiring Board action other than those items on the consent agenda.

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17. Executive Staff Employment Agreements

The Board went into closed executive session – legal and personnel at 1:52 p.m.

The meeting was reopened at 3:08 p.m.

After discussion, Mr. Conway made a motion to approve an amendment to the Gottschalk employment offer letter, as amended, to provide for a lump sum payment on August 31, 2017 of twelve (12) months of her current base salary, in lieu of the Change of Control payment, provided that Ms. Gottschalk remains continuously employed through August 31, 2017 and Article 1 of HB3158 is not made null and void as of such date by operation of Article 3 of HB 3158, and authorize the Chairman to finalize terms and execute such amendment. Mr. Hass seconded the motion, which was approved by the following vote:

For: Conway, Hass, Friar, Haben, Ho, Williams, Sprecher
Against: Griggs, Gates, Wilson, Kingston

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Thursday, June 8, 2017**

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18. 2017 Budget adjustment – Salaries and Benefits

The staff briefed the Board on a change to anticipated expenditures for salaries and benefits in 2017 as compared to the budgeted amount. The increase is due to contractual obligations to executive staff which is offset by certain positions remaining unfilled through the end of the year.

	<u>2017 Budget</u>	<u>Proposed Revised Amount</u>
Salaries and Benefits	\$3,574,374	\$4,199,476

After discussion, Mr. Ho made a motion to approve the proposed increase in the budget for salaries and benefits for 2017. Mr. Hass seconded the motion, which was approved by the following vote:

For: Ho, Hass, Friar, Haben, Conway, Williams, Sprecher
Against: Griggs, Gates, Wilson, Kingston

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19. Bank of America loan

The staff reported that DPFPP currently has total indebtedness outstanding with Bank of America of \$80 million, \$30 million of which is due on June 30, 2017 under a revolver facility. The remaining \$50 million is due under a term loan, with principal payments of varying amounts due every month through December 31, 2017.

The staff believes that paying off the term loan early may be the optimal use of DPFPP's cash in certain circumstances. While the Investment Policy Statement implies that the Executive Director likely has authority to pay off the Bank of America loan prior to maturity, staff is seeking explicit authority to do so at the discretion of the Executive Director.

After discussion, Mr. Griggs made a motion to deny the Executive Director the discretion to pay off the loan early. Mr. Kingston seconded the motion.

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Thursday, June 8, 2017**

19. Bank of America loan (continued)

Ms. Gates requested an amendment to the motion, which would allow the Executive Director to pay off the \$30 million which is due on June 30 under a revolver facility early, plus the \$10 million of the term loan which is due on June 30 early, but to bring the remainder of the term loan back to the Board in July for a decision.

Messrs. Griggs and Kingston accepted the amendment to the motion, which was voted upon and failed as follows:

For: Griggs, Kingston, Gates, Wilson
Against: Friar, Haben, Hass, Ho, Williams, Conway, Sprecher

After discussion, Mr. Hass made a motion to grant the Executive Director the discretion to pay off the loan with Bank of America if the Executive Director believes this is in the best interests of DPFP. Mr. Conway seconded the motion, which was approved by the following vote:

For: Hass, Conway, Friar, Haben, Ho, Williams, Sprecher
Against: Griggs, Kingston, Gates, Wilson

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E. BRIEFING ITEMS

Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System

The Board heard member and pensioner comments.

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**Regular Board Meeting
Thursday, June 8, 2017**

Ms. Gottschalk stated that there was no further business to come before the Board. On a motion by Mr. Haben and a second by Mr. Wilson, the meeting was adjourned at 3:16 p.m.

Samuel L. Friar
Chairman

ATTEST:

Kelly Gottschalk
Secretary

DRAFT



DISCUSSION SHEET

ITEM #C1

Topic: Welcome of newly-appointed and re-appointed Trustees

Discussion: On Wednesday, June 21, 2017, the City Council approved the following (re)appointments to the Dallas Police & Fire Pension System Board:

Position 1 – Councilmember Jennifer S. Gates

Position 2 – Councilmember Scott Griggs

Position 3 – Councilmember Philip T. Kingston

Position 4 – Councilmember Tennell Atkins

The updated DPFP Board appointment list from the City Secretary's office is attached.

CITY OF DALLAS BOARD AND COMMISSION MEMBERS

PFP - POLICE AND FIRE PENSION BOARD

Membership: 4 members appointed by the full City Council; 8 members elected by other jurisdictions.

*Quasi-Judicial

Staff Support: KELLY GOTTSCHALK, EXECUTIVE DIRECTOR

POLICE AND FIRE PENSION FUND

Phone: 214-638-3863

4100 HARRY HINES SUITE 100
DALLAS, TEXAS 75219

Fax: 214-638-6403

Position 01 JENNIFER S GATES
CITY COUNCILMEMBER

W F 13 C Reappointed 06/21/2017
Nominated by RAWLINGS
Terms served: 1
Member since: 5/25/2016

Position 02 SCOTT GRIGGS
CITY COUNCILMEMBER

W M 03 C Reappointed 06/21/2017
Nominated by RAWLINGS
Terms served: 3
Member since: 1/11/2012

Position 03 PHILIP T KINGSTON
CITY COUNCILMEMBER

W M 14 C Reappointed 06/21/2017
Nominated by RAWLINGS
Terms served: 2
Member since: 8/7/2013

Position 04 TENNELL ATKINS
CITY COUNCILMEMBER

B M 08 C Appointed 06/21/2017
Nominated by RAWLINGS
Terms served: 0

This board requires that nominees for positions on this board have one of the following qualifications: The City Council shall name from among its members, four (4) Council members who shall serve as Trustees of the Board. The places of those named by the Council shall be designated as Council Places numbered 1 through 4. The Council Place to be filled by each Council Member. Trustee shall be designated at the time of appointment. The Council member Trustees shall be named as soon as possible after the first Monday after the final election of Council members and shall serve for the term of office to which they were elected as Council members. In the event the City Council fails to select a Council member as Trustee within the prescribed period of time, the person who has been filling the Council Member Trustee position shall continue to serve as Trustee until such time as said selection is made. If there is a vacancy in any of the Council member Trustees' seats on the Board, for any reason other than the failure of the City to select a Council member as a Trustee, the City Council shall name another Council member to serve out the remainder of the unexpired term.



DISCUSSION SHEET

ITEM #C2

- Topic:** January 1, 2017 actuarial valuation
- Attendees:** Jeff Williams and Samantha Allen, Segal Consulting
- Discussion:** Jeff Williams and Samantha Allen, of Segal Consulting, DPFP's actuarial firm, will be present to discuss results of the January 1, 2017 actuarial valuation report, including the GASB No. 67 actuarial valuation.
- Staff**
- Recommendation:** **Approve** issuance of the January 1, 2017 actuarial valuation report, subject to final review and approval by the Executive Director.



DISCUSSION SHEET

ITEM #C3

Topic: 2016 audit

Attendees: Jill Svoboda, BDO, Partner
Rachel Pierson, BDO, Manager

Discussion: Representatives from BDO, DPF's independent audit firm, will be present to discuss the results of their audit for the year ended December 31, 2016.

In addition, the Chief Financial Officer will present the draft of the 2016 audited financial statements.

DPFP is required under Sections 802.103 and 802.104 of the Texas Government Code to submit to the State Pension Review Board (PRB) an annual financial report reflecting the financial condition of DPF as of the last day of the fiscal year covered in the report. The information is to be provided within 210 days of the last day of the fiscal year (July 30, 2017).

The report is scheduled to be completed following final approval by the Executive Director, as well as BDO. Upon completion, the report will be posted to the DPF website and provided to the PRB and the City of Dallas.

The Audit Committee will report findings from their meeting with BDO held on July 12.

Staff

Recommendation: **Approve** issuance of the 2016 audit report, subject to final review and approval by BDO and the Executive Director.



AUDIT WRAP-UP

DECEMBER 31, 2016

The following communication was prepared as part of our audit, has consequential limitations, and is intended solely for the information and use of those charged with governance (e.g., Board of Directors and Audit Committee) and, if appropriate, management of the System and is not intended and shall not be used by anyone other than these specified parties.

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

BDO is the brand name for the BDO network and for each of the BDO Member Firms.





July 13, 2017

Board of Trustees and Audit Committee
Dallas Police and Fire Pension System

Professional standards require us to communicate with you regarding matters related to the audit, that are, in our professional judgment, significant and relevant to your responsibilities in overseeing the financial reporting process. On April 13, 2017 we presented an overview of our plan for the audit of the financial statements of the Dallas Police and Fire Pension System (the System) as of and for the year ended December 31, 2016, including a summary of our overall objectives for the audit, and the nature, scope, and timing of the planned audit work.

This communication is intended to elaborate on the significant findings from our audit, including our views on the qualitative aspects of the System's accounting practices and policies, management's judgments and estimates, financial statement disclosures, and other required matters.

We are pleased to be of service to the System and to discuss our audit findings, as well as other matters that may be of interest to you, and to answer any questions you might have.

Respectfully,

BDO USA, LLP

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Discussion Outline

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Status of Our Audit

We have substantially completed our audit of the financial statements, including procedures applied to the supplemental schedules, of the System as of and for the year ended December 31, 2016, with the exception of the items noted below in “open items”. Our audit was conducted in accordance with auditing standards generally accepted in the United States of America and adheres to the guidelines established by the Governmental Accounting Standards Board. This audit of the financial statements does not relieve System management or those charged with governance of their responsibilities.

- The objective of our audit was to obtain reasonable - not absolute - assurance about whether the financial statements are free from material misstatements.
- The scope of the work performed was substantially the same as that described to you in our earlier Audit Planning communications.
- We expect to issue an unmodified opinion on the financial statements and release our report upon completion of our final audit procedures, as well as final approval of the Board and obtaining the final signed representation letters.
- Our responsibility for other information in documents containing the System’s audited financial statements does not extend beyond the financial information identified in the audit report, and we are not required to perform procedures to corroborate such other information. However, in accordance with professional standards, we will read the information included by the System and consider whether such information, or the manner of its presentation, is materially inconsistent with its presentation in the financial statements. Our responsibility also includes calling to management’s attention any information that we believe is a material misstatement of fact.
- All records and information requested by BDO were freely available for our inspection.
- Management’s cooperation was excellent. We received full access to all information that we requested while performing our audit, and we acknowledge the full cooperation extended to us by all levels of the System personnel throughout the course of our work.

Open Items: As of July 13, 2017

- Finalization of audit procedures with respect to the actuarial valuations
- Finalization of investment testing related to two audit reports yet to be provided by an external manager
- Obtain legal update letters (must be completed within 7 days of report issuance)
- Completion of subsequent event procedures (must be completed within 7 days of report issuance)
- Receipt of the signed management representation letter



Results of Our Audit

ACCOUNTING PRACTICES, POLICIES, AND ESTIMATES

The following summarizes the more significant required communications related to our audit concerning the System's accounting practices, policies, and estimates:

The System's significant accounting practices and policies are those included in Note 2 to the financial statements. These accounting practices and policies are appropriate; comply with generally accepted accounting principles, industry practice and governmental accounting standards. They were consistently applied, and are adequately described within Note 2 to the financial statements.

- A summary of recently issued accounting pronouncements is included in Note 2 to the System's financial statements. GASB No. 72 *Fair Value Measurement and Application*, was adopted by the System January 1, 2016 and appropriately disclosed on the financial statements.
- There were no changes in significant accounting policies and practices during 2016.

Significant estimates are those that require management's most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain. The System's significant accounting estimates, including a description of management's processes and significant assumptions used in development of the estimates, are disclosed in Notes 2, 4 and 5 of the financial statements. The significant estimates include the following:

Actuarial estimates

Fair value measurements

Management did not make any significant changes to the processes used to develop the significant accounting estimates in 2016. However, due to House Bill 3158, Management and the Board did undertake a process to update significant actuarial assumptions which affect the actuarial valuation as presented in the funding disclosures to the financial statements in MD&A.

Results of Our Audit

CORRECTED AND UNCORRECTED MISSTATEMENTS

There were no corrected or uncorrected misstatements related to accounts and/or disclosures that we presented to management.

QUALITY OF THE SYSTEM'S FINANCIAL REPORTING

A discussion was held regarding the quality of the System's financial reporting, which included the following:

- Qualitative aspects of significant accounting policies and practices
 - BDO has no issues with the quality of the System's accounting policies and practices.
- Our conclusions regarding significant accounting estimates
 - BDO concurs with the System's critical accounting policies and practices with respect to significant estimates.
- Financial statement presentation
 - BDO does not note exceptions to the System's financial statements
- New accounting pronouncements
 - BDO notes GASB No. 72 Fair Value Measurement and Application was the only new accounting pronouncement adopted by the System during the year.
- Alternative accounting treatments
 - BDO notes that there are no alternative accounting treatments adopted by the System during the year.

Results of Our Audit

Below is a summary of select policies, areas and findings -

Internal Controls

Summary of procedures:

- Reviewed internal controls in place over financial reporting, distributions, payroll data, investments, system expenses, and system obligations.
- Obtained and reviewed the Service Organization Controls reports for JPMorgan, the System's Custodian, and Financial Control Systems, now called STP Investment Services, LLP, the System's investment accounting service provider.

Findings:

- During our Board interview process it was brought to our attention that occasionally a member's benefits may be either overpaid or underpaid due to the member being improperly set up in the system used for distributions. We noted that these instances have not been material individually or in the aggregate to the financial statements as a whole and the instance noted had occurred in a prior year. During our audit procedures we noted the System does have properly designed controls in place to help prevent and detect such situations and such controls appeared to be operating as designed to prevent and identify such occurrences.
- No issues were noted during our review of internal controls which caused us to adjust planned audit procedures.

Results of Our Audit

Below is a summary of select policies, areas and findings -

Actuarial Valuation

Summary of procedures:

- Obtained actuarial reports and related requested data directly from the actuary.
- Ensured the census information provided was complete, accurate, and as of benefit information date.
- Tested census information in correlation with eligibility testing.
- Reviewed the actuarial valuation reports and utilized BDO's Actuarial Managing Director to perform an independent review of the reports and assumptions used. Primary areas of focus included the discount rate, inflation rate, payroll growth rate and DROP withdrawal rate. In addition we considered the assumptions most impacted by House Bill 3158 which affect the funding disclosures in MD&A. We noted such assumptions included the normal and early retirement ages, vesting, computation pay, change in supplemental benefit, active DROP changes, employee and employer contributions, depletion date, and future net pension liability.
- Reviewed actuarial disclosures for completeness and accuracy during the review of the financial statements.

Findings:

- Based on the review by BDO and BDO's experts, the actuarial methods employed by the System meet the requirements under GASB and Actuarial Standards of Practice.

Eligibility

Summary of procedures:

- Agreed demographic information to the census data used by the actuary.
- Ensured members were properly included or excluded from the system or census based on system requirements.

Findings:

- No issues were identified in our testing.

Results of Our Audit

Below is a summary of select policies, areas and findings -

Contributions

Summary of procedures:

- Obtained and reviewed a reconciliation of all contributions reported.
- Confirmed the contributions made during 2016 directly with the City.
- Tested a sample of participant contributions and recalculated amounts based on the System provisions.

Findings:

- No issues were identified in our testing.

Benefit Payments

Summary of procedures:

- Reviewed reconciliation of annuity and lump sum payments.
- Tested a sample of participants receiving benefits and ensured the participants selected were eligible to receive payment.
- For sample selected, traced amounts of benefit payments to the actual payments recorded per the payment register. Additionally, ensured proper tax was withheld and proper authorization of benefit payments was made.
- For each selection, obtained the calculation of benefits and recomputed the benefit amount based upon the participant data and ensured it was in accordance with the System documents.
- Reviewed annuity payments by month for any unusual variations.

Findings:

- No issues were identified in our testing.

Results of Our Audit

Below is a summary of select policies, areas and findings -

Investments

Summary of procedures:

- Tested investments by selecting a sample using statistical sampling techniques.
 - Obtained confirmations from investment managers and reviewed audited financial statements for investments selected. Reviewed confirmations for unusual items and misclassifications. Additionally, performed recalculations based on the unit values in the audited financials.
 - A majority of the real estate investments have audited financial statements. Consideration of those internally managed real estate investments included review of appraisals by BDO Valuation Real Estate Specialists.
 - Reviewed all complex investment valuation techniques and approach.
 - Reviewed purchase agreements and letters of intent for properties sold or currently for sale.
 - Reviewed Management's valuation memos in obtaining an understanding of the supporting process for establishing fair value.
 - Confirmed all cash balances.
 - Reconciled unit information recorded by the System to JPMorgan and to the fund's financial statements.
 - Selected a sample of transactions for investment transaction testing and agreed the purchase/sales price to approved pricing sources.
 - Recalculated the exchange rate used for certain investments by comparing the rate to a third party source such as Oanda.com.
- Reviewed the investment policy and reviewed for deviations from policy.
- Reviewed Management's fair value considerations and fair value hierarchy by investment in correlation with GASB No. 72.

Findings:

- No issues were identified in our testing.

Results of Our Audit

Below is a summary of select policies, areas and findings -

Other Receivables, Payables and System Expenses

Summary of procedures:

- Confirmed and reviewed contributions receivables.
- Reviewed the reasonableness of interest and dividend receivables.
- Reviewed management's policy for securities lending and the accounting treatment of such transactions.
- Reviewed the schedule of accrued expenses. Tested fund management fees payable and accrued uncompensated balances.
- Performed a search for unrecorded liabilities to ensure all subsequent payments after year end which related to 2016 were appropriately accrued.
- Confirmed all long term debt balances and reviewed all debt amendments.
- Reviewed investment contracts in correlation with testing system expenses.
- Sampled administrative fees and selected individual transactions to test.
- Sampled management fee expenses and agreed the expense to confirmation received from investment managers where applicable. Reviewed and recalculated the breakout of fees and agreed amounts to actual invoices and payment support.

Findings:

- The System was in default of its line of credit as of December 31, 2016 due to the fact that the surplus liquidity ratio covenant was not met for the quarter ended September 30, 2016. The System obtained a waiver and the loan agreement was amended. We have reviewed the amendment and financial statement disclosures for appropriateness.
- No other issues were identified in our testing.

Investment Income

Summary of procedures:

- Selected a sample of dividends received and verified to an independent market source.
- Tested interest earned by recalculating individual transactions and performing a reasonableness test.
- Reconciled investment value and investment income to JPMorgan.
- Recalculated realized and unrealized gains and losses for a sample of transactions.

Findings:

- No issues were identified in our testing.

Results of Our Audit

Below is a summary of select policies, areas and findings -

Other Receivables, Payables and System Expenses

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Summary of procedures:

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- Tested interest earned by recalculating individual transactions and performing a reasonableness test.
- Reconciled investment value and investment income to JPMorgan.
- Recalculated realized and unrealized gains and losses for a sample of transactions.

Findings:

- No issues were identified in our testing.

Fraud, Commitments and Contingencies and Subsequent Events

Fraud procedures:

- Performed interviews with a sample of members of the Board of Trustees, Management, and other individuals and considered responses received in determining necessary audit procedures.
- The nature, timing and extent of our procedures across areas of the audit were also varied, mainly by auditing items that would be considered below our normal vouching scope.
- Performed detailed journal entry testing to review for any potential unusual or fraudulent transactions.

Commitments and Contingencies:

- Due to the litigation in 2016 we expanded our legal expense testing and reviewed legal invoices carefully for any unusual matters that were not already disclosed to us. No such matters were identified.
- Based on the legal confirmation responses received the System is appropriately disclosing legal matters in Note 10.

Subsequent Events:

- Reviewed House Bill 3158 and summary of plan changes associated with the new bill.
- Reviewed subsequent debt amendment.
- Reviewed subsequent asset sale agreements.
- Will obtain legal update letters prior to issuance.
- Will perform final subsequent event procedures, including inquiries of Management, prior to issuance.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

Our consideration of internal control was for the limited purpose described above and was not designed to identify all deficiencies in internal control that might be significant deficiencies or material weaknesses.

We are required to communicate, in writing, to those charged with governance all material weaknesses and significant deficiencies that have been identified in the System's internal controls over financial reporting. The definitions of control deficiency, significant deficiency and material weakness follow:

Category	Definition
Deficiency in Internal Control	A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis.
Significant Deficiency	A deficiency or combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.
Material weakness	A deficiency or combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the System's financial statements will not be prevented, or detected and corrected on a timely basis.

In conjunction with our audit of the financial statements, we noted no material weaknesses.

Other Required Communications

Following is a summary of other required communications, along with specific discussion points as they pertain to the System.

Requirement	Discussion Points
Significant changes to planned audit strategy or significant risks initially identified	There were no significant changes to the planned audit strategy or significant risks initially identified and previously communicated to those charged with governance as part of our Audit Planning communications.
Obtain information from those charged with governance relevant to the audit	There were no matters noted relevant to the audit, including, but not limited to: violations or possible violations of laws or regulations; risk of material misstatements, including fraud risks; or tips or complaints regarding the System's financial reporting that we were made aware of as a result of our inquiry of those charged with governance.
If applicable, nature and extent of specialized skills or knowledge needed related to significant risks	<p>The nature and extent of specialized skills or knowledge needed to perform the planned audit procedures or evaluate audit results related to significant risks are outlined below:</p> <ul style="list-style-type: none"> • Utilized BDO's Actuarial Managing Director and Actuarial Manager to review the assumptions presented in the actuarial report. • Utilized BDO Valuation Real Estate specialists for review of the appraisal for the internally managed asset selected for testing.
Consultations with other accountants	We are not aware of any consultations about accounting or auditing matters between management and other independent public accountants. Nor are we aware of opinions obtained by management from other independent public accountants on the application of generally accepted accounting principles.
Significant findings and issues arising during the audit in connection with the System's related parties	We have evaluated whether the identified related party relationships and transactions have been appropriately identified, accounted for, and disclosed and whether the effects of the related party relationships and transactions, based on the audit evidence obtained, prevent the financial statements from achieving fair presentation.

Other Required Communications

Requirement	Discussion Points
Disagreements with management	There were no disagreements with management about matters, whether or not satisfactorily resolved, that individually or in aggregate could be significant to the System's financial statements or to our auditor's report.
Significant difficulties encountered during the audit	There were no significant difficulties encountered during the audit.
If applicable, other matters significant to the oversight of the System's financial reporting process, including complaints or concerns regarding accounting or auditing matters	There are no other matters that we consider significant to the oversight of the System's financial reporting process that have not been previously communicated.
Representations requested from management	Please refer to the management representation letter to be provided upon issuance of the report.



Independence Communication

Our engagement letter to you dated February 7, 2017 describes our responsibilities in accordance with professional standards and certain regulatory authorities with regard to independence and the performance of our services. This letter also stipulates the responsibilities of the System with respect to independence as agreed to by the System. Please refer to that letter for further information.



DISCUSSION SHEET

ITEM #C4

Topic: HB 3158 transition update

Discussion: Staff will update the Board on the status of the HB 3158 implementation.



DISCUSSION SHEET

ITEM #C5

- Topic:** 2016 Comprehensive Annual Financial Report
- Discussion:** Staff will present a draft of the 2016 Comprehensive Annual Financial Report.
- Staff**
- Recommendation:** **Authorize** the Executive Director to issue the 2016 Comprehensive Annual Financial Report upon finalization.



DISCUSSION SHEET

ITEM #C6

Topic: Emerging Markets equity manager search

Attendees: Keith Stronkowsky, NEPC – Senior Consultant
Ashley B. Hyotte, RBC Global Asset Management – Institutional Portfolio Manager
Tom Heflin, RBC Global Asset Management – Managing Director
Laurence Bensafi (by phone), RBC Global Asset Management – Deputy Head of EM Equity

Discussion: In accordance with DFPF's goal of redeploying cash into liquid asset classes while rebalancing the portfolio towards the target asset allocation, staff recommends engaging RBC Global Asset Management (RBC) to manage an emerging markets equity mandate. DFPF has an Emerging Markets Equity allocation target of 5% with no dedicated emerging markets equity managers. Staff and NEPC performed research and diligence on investment managers included on NEPC's Focus Placement List (FPL) as well as non-FPL managers. NEPC and staff agree on the recommendation and will present an overview to the Board. Representatives from RBC will present an introduction of the firm and their emerging markets equity strategy.

RBC Global Asset Management, a division of the Royal Bank of Canada, has over \$290 billion in assets under management and provides a comprehensive range of investment solutions through multiple offices around the globe. The Emerging Markets Equity strategy, with \$3.16 billion under management, was launched in 2010 and is managed by a team based in London.

Staff

Recommendation: Staff recommends approving an initial investment of \$50 million to the RBC Emerging Markets Equity strategy within DFPF's Emerging Markets Equity asset allocation of the Equity asset category, with authority to increase the investment as permitted by the Investment Policy Statement.

INVESTMENT RECOMMENDATION

Date: July 13, 2017

To: DFPF Board

From: DFPF Investments Staff

Subject: RBC Emerging Markets Equity

Recommendation

Staff recommends approving an initial investment of \$50 million to the RBC Global Asset Management Emerging Markets Equity strategy for core emerging markets (EM) equity exposure as part of the broad Equity category and the EM Equity asset class, with authority to increase the investment as permitted by the Investment Policy Statement.

Executive Summary

At the March 10, 2016 Board meeting, the Board approved a strategic asset allocation policy with a 5% target allocation to EM Equity. In June of 2016, the Board approved an implementation structure that anticipated allocating 3% to a core EM equity manager and 2% to satellite EM equity managers. This was congruent with NEPC's recommended implementation of hiring 2-3 managers, with a dual mandate of broad core exposure and dedicated exposures to small cap and/or consumer focused equity mandates. DFPF currently has no EM equity investment managers, and has only incremental exposure through existing global equity mandates of less than 1%. At the May 11, 2017 Board meeting, staff discussed initiating new investment manager searches to invest cash, including a search for emerging markets equity manager(s) to address under-allocation to this asset class.

Staff recommends hiring RBC, an all-cap core EM equity manager, as the first phase of implementing the anticipated EM Equity structure. This provides broad EM equity exposure with less expected volatility than beginning with only a dedicated EM small cap equity manager. In accordance with the structure study, the recommended core manager should perform well not only on a stand-alone basis, but also be an accommodative complement to an EM small cap mandate in the future. RBC has provided consistent top quartile performance versus peers and outperformed the benchmark while tending to invest more of the portfolio in large and mid-cap companies, therefore making it an appropriate selection. RBC also meets the criteria defined in DFPF's Investment Policy Statement.

Process

Staff has been researching EM equity investment managers – both within and outside of NEPC’s EME Focused Placement List - for over one and a half years. Staff has reviewed materials, conducted meetings, and had multiple phone calls with both NEPC and over 15 potential investment managers. Staff and NEPC conducted on-site diligence meetings with several potential managers in early 2016. More recently, staff has worked alongside NEPC to review and analyze the firms in the NEPC emerging markets equity search book. During this analysis, firms were further reviewed and compared based on strategy, degree of active management, performance in both rising and falling markets, pricing, portfolio positioning, track record, team, fit for DPFP structure, and other characteristics.

- **Portfolio positioning:** In accordance with the anticipated equity structure, the selected strategy should be an accommodative complement to a dedicated EM equity small cap strategy. A few of the firms included in the search were relatively over-concentrated in the small cap space and therefore were eliminated from further consideration.
- **Degree of active management:** Aside from more subjective arguments such as market inefficiencies, analyst coverage, etc., research revealed that the MSCI EM index performed in the bottom quartile of the eVestment peer universe over longer time periods (3 and 5 years). Thus, to be an index-like, close-to-benchmark manager meant to be a bottom quartile manager in emerging markets. Several candidates included in the search fell into this category and therefore were eliminated from further consideration.
- **Appropriateness as a stand-alone manager:** In consideration of the historical volatility of EM equity markets and uncertain timing as to when the anticipated EM equity structure will be completed, the selected strategy should perform competitively in both up markets and down markets on a stand-alone basis. Several candidates were considered appropriate only in a multi-manager portfolio due to performance volatility and other factors.

Staff also conducted reference calls with institutional investors who performed emerging market equity investment manager searches and ultimately hired RBC. No major concerns surfaced during these calls, and the investors separately had consistent remarks concerning RBC’s responsiveness, portfolio management approach, and favorable fees.

RBC Emerging Markets Equity Strategy

RBC Global Asset Management (RBC), is the investment management arm of Royal Bank of Canada. The firm manages over \$290 billion across a variety of strategies through offices across the globe, including Boston, Chicago, and Minneapolis. Although RBC is wholly owned by Royal Bank of Canada, each investment strategy group is specialized and responsible for its own performance and profit and loss. The Emerging Markets Equity (EM Equity) strategy was launched in 2010 and has \$3.16 billion under management.

Personnel

Phillipe Langham, Head of EM Equity, started and still leads the strategy. The London based team consists of 8 members with 114 years combined experience, the most junior member having over 7 years of experience. Although a small team, they are able to provide efficient coverage by being entirely focused on research. Support for trading, operations, etc. comes from the larger RBC organization. Three members have worked together at RBC practically since inception of the strategy, and three other team members worked together for four years at a previous firm prior to joining RBC in 2013. This is a cohesive team with very little turnover. Team member compensation is based on strategy performance versus peers, with a heavier weighting towards longer term performance. This aligns incentives with investors. The team has a defined, repeatable investment process that can be successfully continued in case of a key person's absence, and has a definitive succession plan.

Portfolio and Investment Strategy



Thematic Research

RBC's investment process begins with top-down identification of long-term macroeconomic themes that apply across countries, sectors, and market capitalizations so that the opportunity set is not constrained. Some examples include domestic consumer consumption, health and wellness, robotics and automation, and digitalization.

Stock Selection

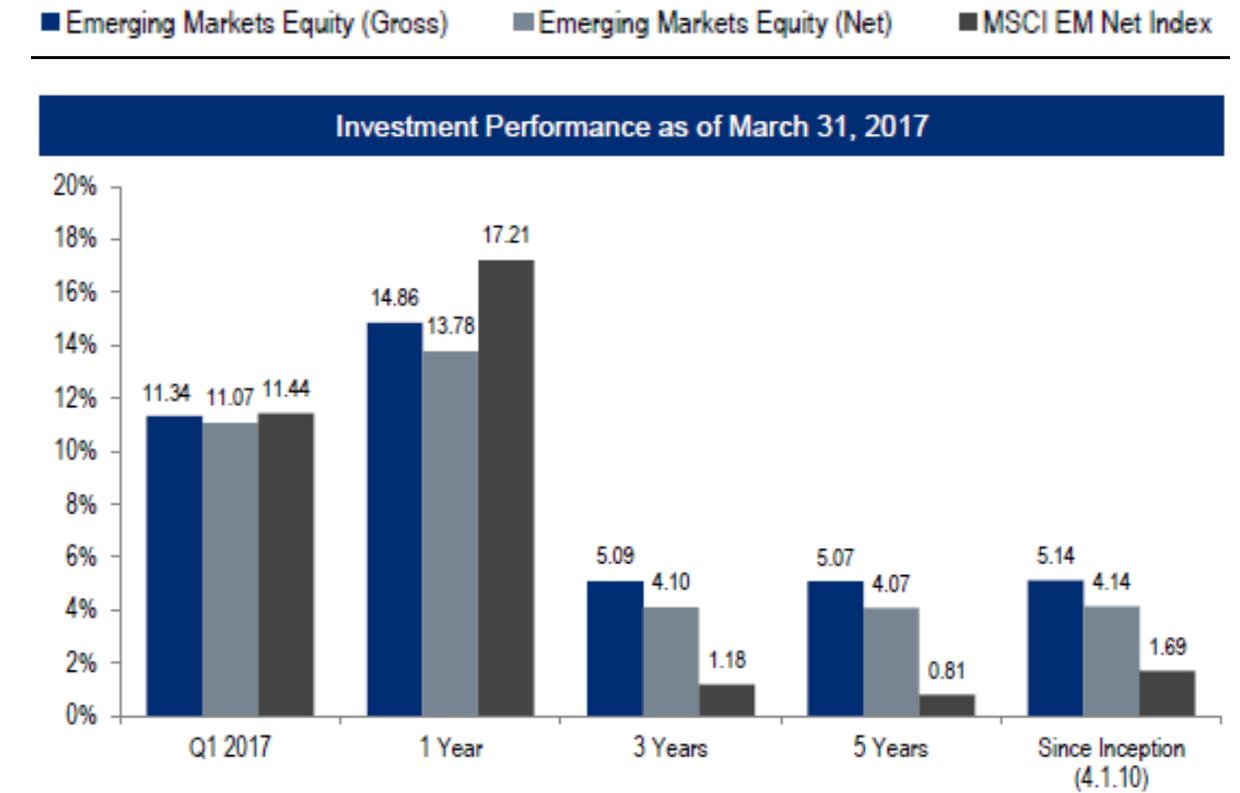
RBC then looks for the companies best poised to benefit from these themes by screening a universe of 2500 stocks down to a set that meets their investment criteria. RBC focuses on quality factors such as cash flow, management quality, industry dominance, barriers to entry, profitability, valuation, and governance. Some unique features in RBC's process include the following:

- Management integrity analysis – RBC places a strong emphasis on management integrity, and researches not only what management has done at the current company, but what they have done historically at prior companies as well.
- ESG considerations – Environmental, Social, and Governance considerations play a strong role in the investment process due to RBC’s conviction in ESG’s contribution to alpha.
- 5-year time horizon – RBC evaluates companies based on ability to generate cash flow and continue to be sustainable over a longer time horizon, when it expects the most value to be created.

The result is a portfolio with the following characteristics:

- Portfolio of 50-60 high conviction best ideas
- Benchmark agnostic - sectors may be 15% above or below the benchmark allocation
- High active share of approximately 80%
- Low turnover – approximately 17% annual turnover in company names, 35% total portfolio

Performance



Risk Characteristics (3 Years)	
<u>Return</u>	
Portfolio	5.1%
Benchmark	1.2%
<u>Standard Deviation</u>	
Portfolio	13.0%
Benchmark	15.9%
<u>Sharpe Ratio</u>	
Portfolio	0.4
Benchmark	0.1
<u>Information Ratio</u>	
Portfolio	0.7

The RBC Emerging Markets Equity strategy has produced risk-adjusted returns consistently higher than the MSCI – EM index over longer time periods. This performance has resulted in a top quartile ranking in both returns and Sharpe ratio versus peers in the 3 and 5-year periods. The strategy will underperform in rallies led by energy and materials sectors due to lack of exposure to these sectors. This was the case in 2016 and the effect on the 1-year performance is evident. However, the strategy tends to outperform in down markets, exhibiting a historical downside capture rate of just 64-72%, meaning the strategy only declined 64-72% as much as the index during down periods.

Pricing and Liquidity

- 3c7 Investment Management Fees (NEPC Client Preferred Pricing):
 - First \$50 million – 70bps
 - Next \$50 million – 65bps
 - >\$100 million – 60bps
- Operational expenses (NEPC Client Preferred Pricing):
 - Capped at 15bps annually
- 50bps redemption fee on withdrawal of over 50% of investment within 6 months
- Daily liquidity with 5 business days notice

Summary

Staff and NEPC recommend investing \$50 million in the RBC Emerging Markets Equity strategy as a core EM equity implementation within the EM Equity sub-allocation. The strategy is managed by an experienced cohesive team, has top quartile risk-adjusted performance, provides some downside protection, and is an appropriate complement for potentially adding an EM equity small-cap manager in the future.

IPS Checklist:

1. Lead portfolio manager tenure/experience at least 5 years: Phillipe Langham has 25years experience
2. Firm level assets under management greater than \$75 million: RBC has \$290 billion AUM
3. Consistent investment style, compared against peers: RBC is an EM equity manager with top quartile performance in 3 and 5 year periods
4. Sharpe ratio greater than .3 and exceeds median peer group over 3-year period: RBC 3 year Sharpe of .4 and rank of top 9%
5. 3-year net return exceeds median peer group: RBC 3-year return is 5.1% and ranks in top 13%
6. On-site diligence recommended: conducted Boston office on-site January 28, 2016
7. Fiduciary acceptance and acknowledgement: Yes

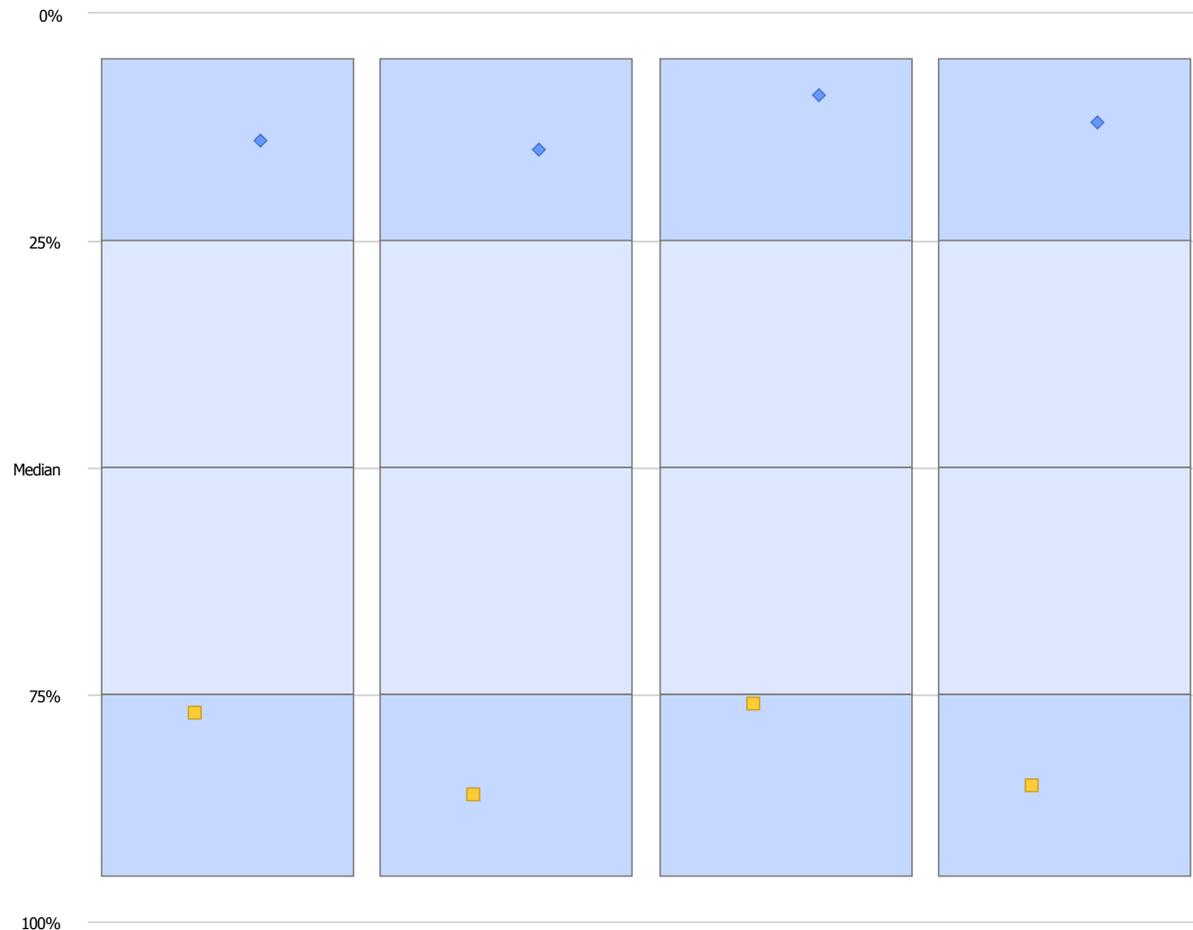
RBC Emerging Markets Equity

Updated as of 07/13/2017



PROPOSED NEW INVESTMENT	
1) Name of investment and manager	RBC Global Asset Management - Emerging Markets Equity
2a) DPFP Asset Category	Equity
2b) Asset Category allocation / target	22.9%/30%
3a) DPFP Asset Class	EM Equity
3b) Asset Class allocation / target	0%/5%
4) Proposed investment size	\$50 million
5) Projected funding date and schedule	Q3 2017
INVESTMENT STRATEGY/STRUCTURE	
1) Investment strategy	All-Cap Emerging Markets equity, focus on quality via cash flow, ESG
2) Total fund or strategy size	\$3.1 billion
3) Firm assets under management	\$290+ billion
4) Investment Legal Structure	3c7 commingled fund
5) Liquidity	Daily with 5 business days notice
6) Proposed Benchmark	MSCI EM Equity (gross)
7) Peer Group	eVestment Emerging Mkts Equity
8) Management / Performance fees	NEPC discount pricing: 70bps first \$50M (vs 80-85bps), 65bps next \$50M, 60bps over \$100M; opex capped at 15bps (vs17-18bps)
DUE DILIGENCE INFO	
1) Staff meetings with manager	on-site Jan 28, 2016, multiple phone calls and email
2) Consultant Recommendation	Attached
3) Staff Recommendation	Attached
4) Conforms with IPS Criteria (Note any exceptions)	Yes
5) IAC Approval Date	-
6) Board Approval Date	PENDING
7) Actual Investment Funding Date	PENDING

■ MSCI Index: MSCI EM-ND
◆ RBC Global Asset Management: RBC Emerging Markets Equity (London)



Universe: eVestment Emerging Mkts Equity

	VT	RM	Returns 3 Years		Returns 5 Years		Sharpe Ratio 3 Years ¹		Sharpe Ratio 5 Years ¹	
				Rk		Rk		Rk		Rk
5th percentile			7.19		7.62		0.43		0.52	
25th percentile			4.20		4.28		0.26		0.31	
Median			2.65		2.79		0.16		0.19	
75th percentile			1.27		1.38		0.07		0.09	
95th percentile			-1.26		0.00		-0.08		-0.01	
# of Observations			453		354		453		354	
■ MSCI Index	IX	IX	1.18	77	0.81	86	0.07	76	0.05	85
◆ RBC Global Asset Management	SA	GF	5.09	14	5.06	15	0.37	9	0.40	12

Results displayed in USD.

¹Citigroup 3-Month T-Bill



D A L L A S
POLICE & FIRE
PENSION SYSTEM



Emerging Markets Equity Recommendation

July 13, 2017

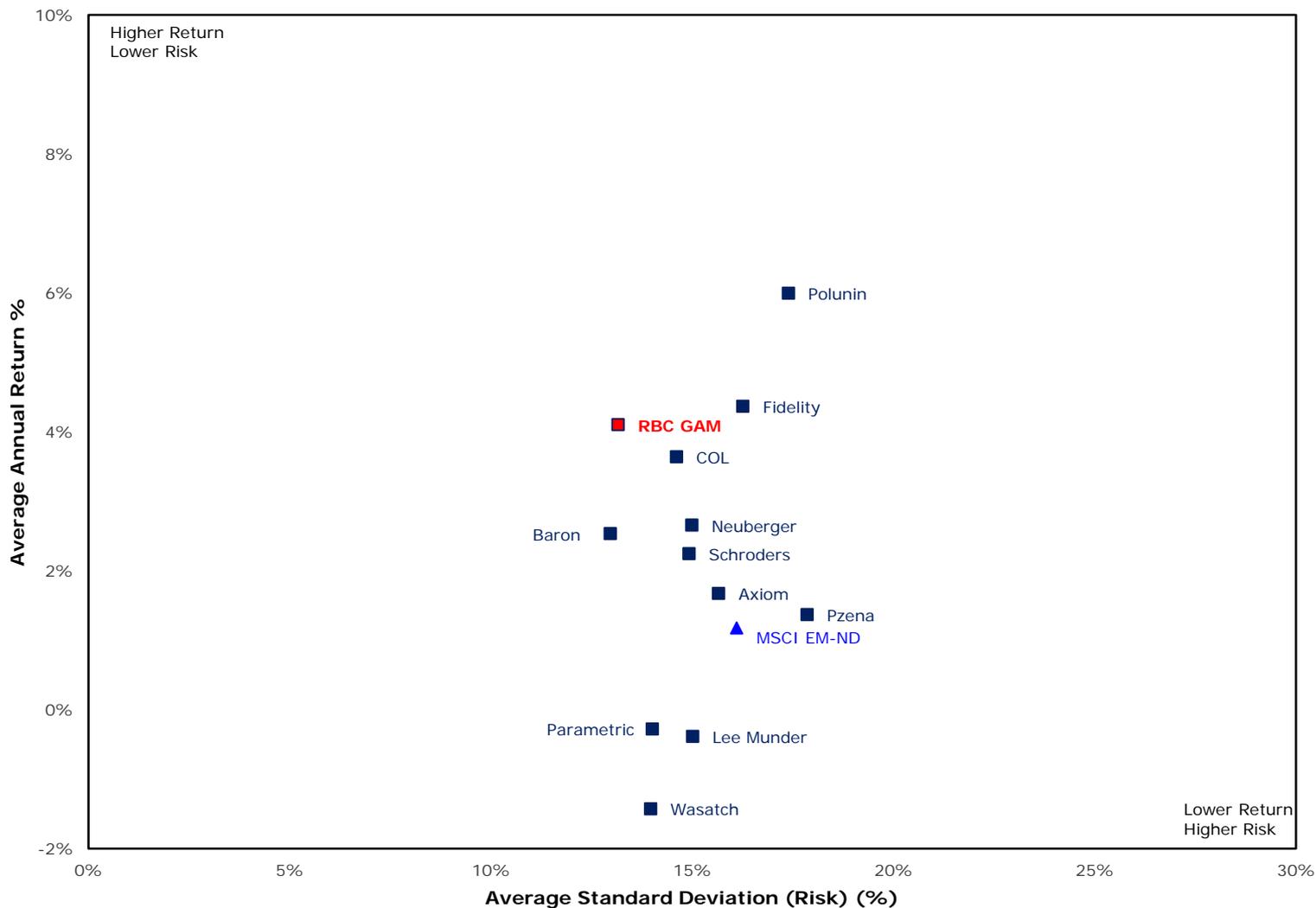
Overview

- Goals:
 - Deploy cash
 - Re-balance towards target allocation
 - Continue Equity structure implementation
- Current EM Equity allocation is less than 1% vs. target of 5%
- Structure study proposed core EM Equity manager and 1-2 satellite managers
- No current EM Equity managers
- Hire core all-cap EM Equity manager first

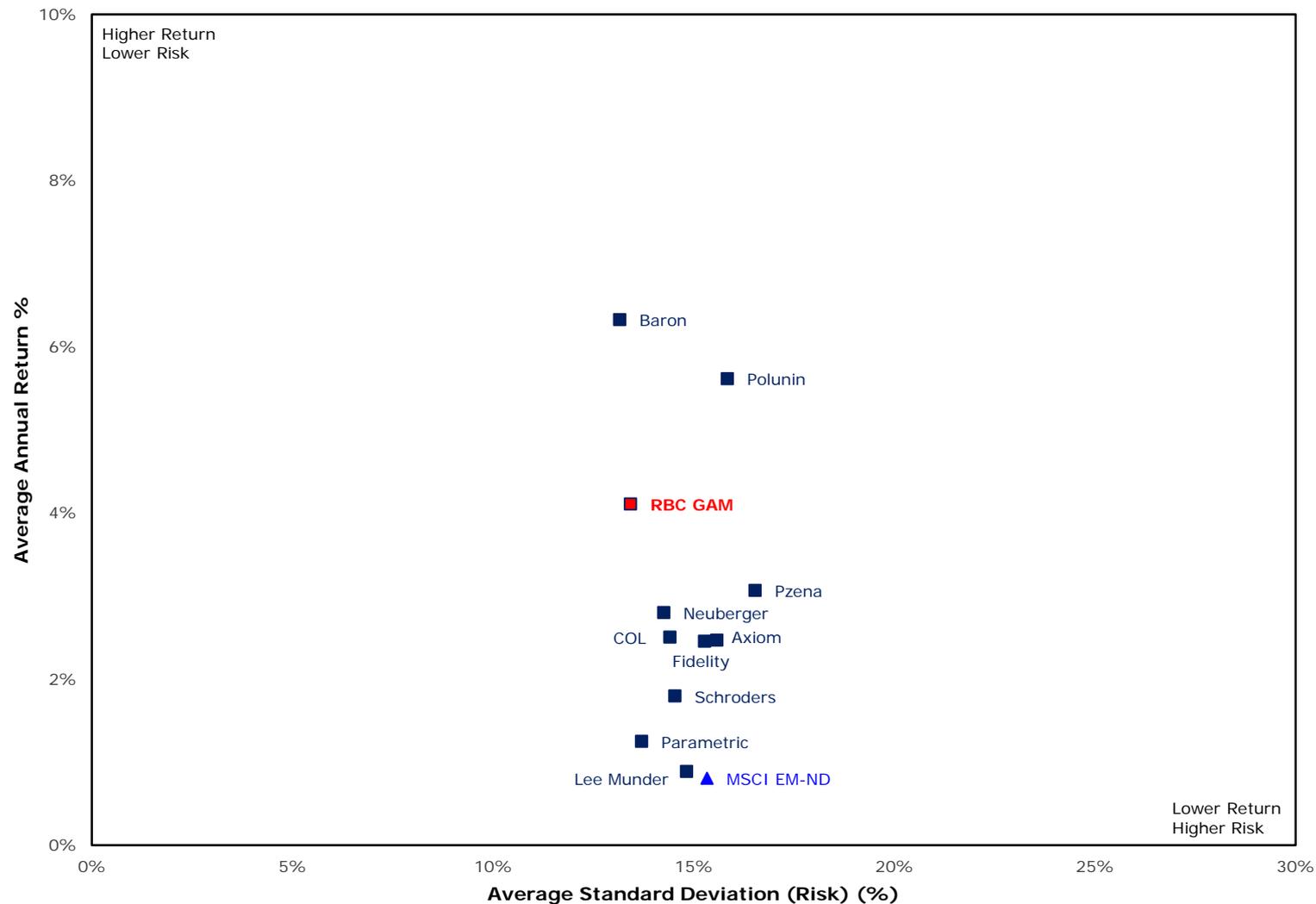
Process

- Research and diligence begun in early 2016
- Consideration of NEPC FPL and non-FPL managers
- On-site meetings, multiple phone meetings, email and phone follow-ups with candidates
- Multiple consultations with NEPC
- Review and analysis of NEPC EM Equity search book
- Review and analysis of candidate materials
- Interviewed 2 institutional investor references
- Considerations included, but not limited to:
 - Risk-adjusted returns and rankings
 - Performance in up and down markets
 - Portfolio positioning

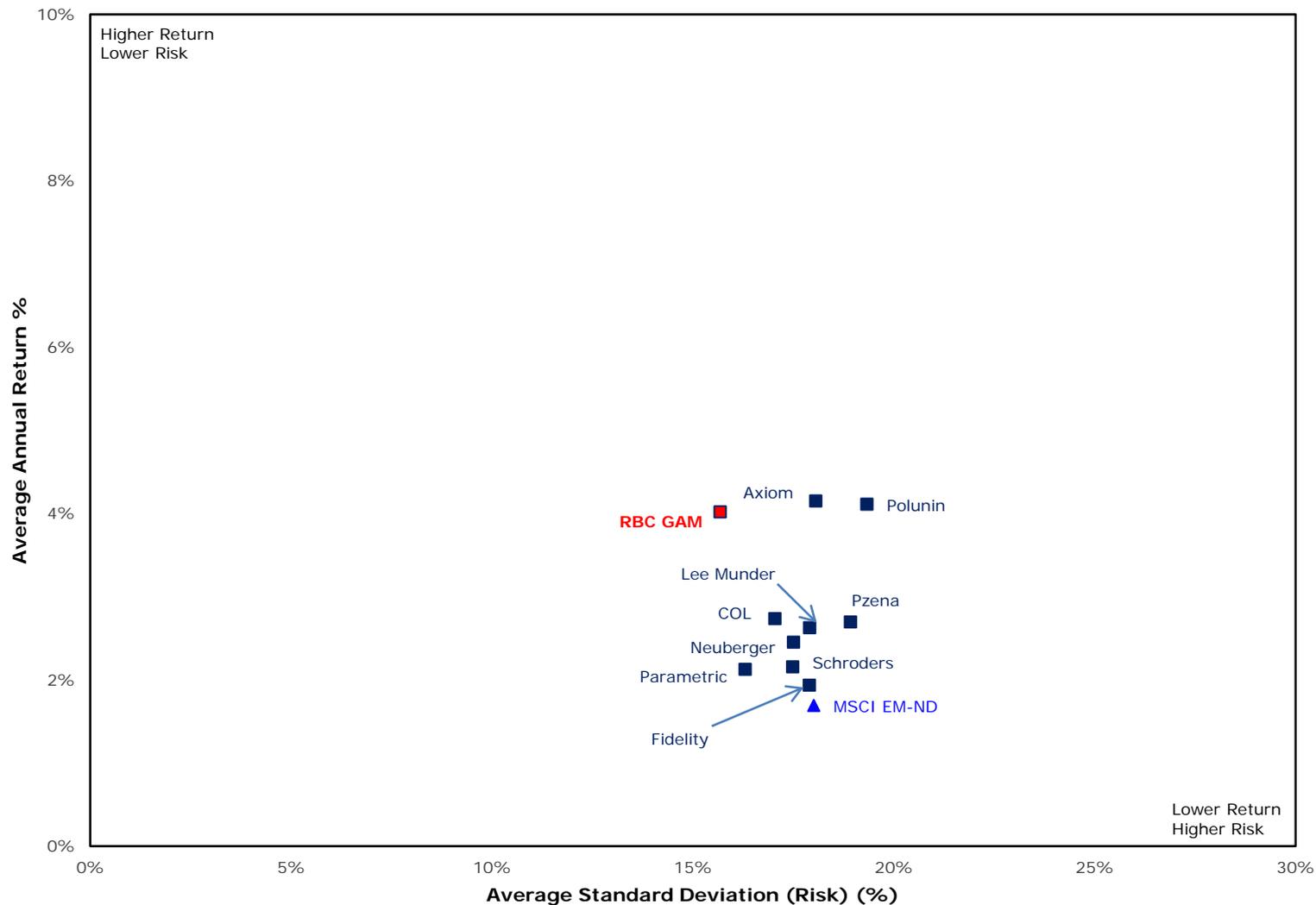
3 Year Total Risk/Returns Comparison - (Net of Fees)



5 Year Total Risk/Returns Comparison - (Net of Fees)



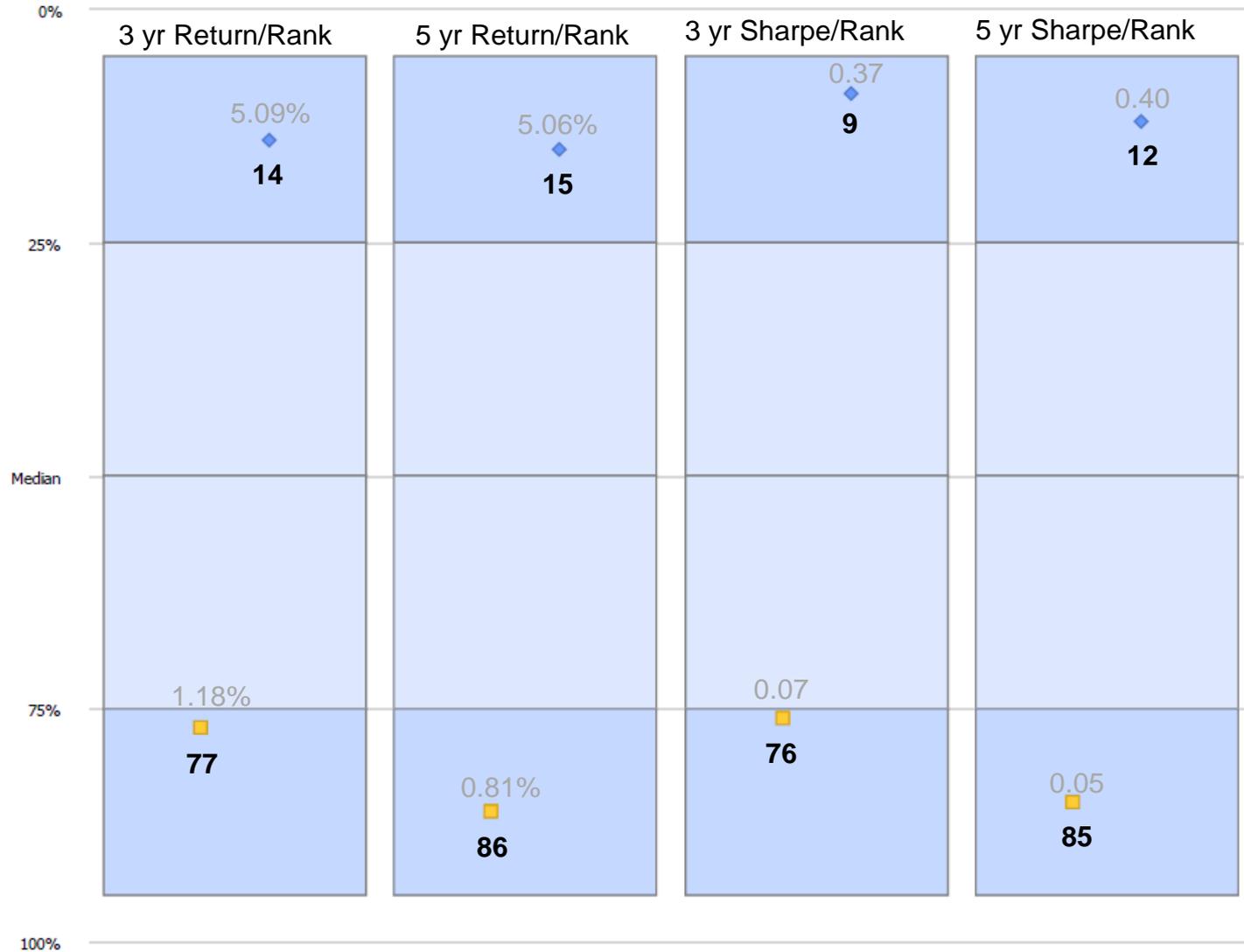
7 Year Total Risk/Returns Comparison - (Net of Fees)



Peer Ranking Analysis

As Of: March 31, 2017

- MSCI Index: MSCI EM-ND
- ◆ RBC Global Asset Management: RBC Emerging Markets Equity (London)



Pricing and Liquidity

- Investment Management Fees (NEPC Client Preferred Pricing):
 - First \$50 million – 70bps
 - Next \$50 million – 65bps
 - Over \$100 million – 60bps
- Operational expenses (NEPC Client Preferred Pricing):
 - Capped at 15bps annually
- 50bps redemption fee for withdrawal of over 50% of balance within 6 months of subscription
- Daily liquidity with 5 business days notice

Recommendation

Engage RBC Global Asset Management for the Emerging Markets Equity strategy:

- Provides core all-cap EM equity exposure
- Good complement for adding small-cap EM equity in the future
- Experienced and cohesive team
- Consistent top-quartile performance over time
- Historical downside protection



NEPC, LLC

To: Trustees & Staff
Dallas Police & Fire Pension System (DPFP)

From: Rhett Humphreys, CFA, Partner
Keith Stronkowsky, CFA, Sr. Consultant

Date: July 13, 2017

Subject: Emerging Markets Equity Manager Recommendation

BACKGROUND:

In March 2016, DPFP approved a new long-term strategic Asset Allocation plan which calls for a 5% target allocation (\$105m, as of 5/31/17) to Emerging Markets Equity (EME). Currently, DPFP has about 1% of exposure to EME through the Global Equity and GAA managers, so retaining a dedicated EME manager will be imperative to achieve the full 5% policy target.

As a reminder, emerging markets are developing countries that are typically experiencing rapid growth. The more notable ones are the BRICS (Brazil, Russia, India, China, South Africa), but EME also includes investments in other emerging countries in Eastern Europe, Latin America, as well as in other parts of Asia. Among NEPC's medium-term forecasts, EME has the highest expected return profile of any public equity class, so its inclusion in a portfolio not only provides a return enhancement, but also increased diversification given its lower correlation to other asset classes.

MANAGER SEARCH PROCESS & FINDINGS:

Over the past several months, NEPC and Staff have conducted research and due diligence on potential managers for the allocation to the EME space, including:

- A review of NEPC's EME Focused Placement List (FPL) of preferred strategies—this is a group of strategies that NEPC expects will provide positive net-of-fee alpha over the long term.
- Additional due diligence meetings with potential candidates that fall outside of the FPL.

The focus of the search was to find a manager that would provide broad, all cap exposure and a historical performance profile illustrating some downside protection. Given the volatility and pace of change prevalent in the emerging markets (e.g., political and economic reforms), there was preference given to those managers that incorporated a top-down component to their approach to better capitalize on these themes.

We found that RBC's blended strategy of top down and bottom up research to be the best fit given the focus of the search. The top down process drives the country and sector allocations and influences the stock selection process into more attractive areas of the market, while the bottom up process focuses on quality companies with high



cash flow and industry dominance. Historically, the process has also delivered some down-side protection.

With regards to DFPF's Investment Policy Statement, RBC also meets the following criteria:

- *Sharpe ratio generally would exceed 0.3, which may not be possible following a prolonged bear market in that respective market, and must exceed 50% of its peer group over a three year rolling period. (As of 3/31/17).*
- *Three year rolling total return, on a net of fee basis, must exceed 50% of its peer group. (As of 3/31/2017).*

RECOMMENDATION:

After completing a review of NEPC's Emerging Market Equity Focused Placement List (FPL) and conducting additional due diligence of the potential candidates, NEPC concurs with Staff's view that RBC would be an ideal candidate to initiate the EME implementation. Accordingly, NEPC recommends that the Board retain RBC for this purpose.



**Global Asset
Management**

Dallas Police & Fire Pension System

July 13, 2017

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RBC Global Asset Management

We are single-mindedly focused on our clients

- Service mindset pervades our organization
- Different clients, unique needs, relevant solutions

Our investment teams are specialized and strengthened by global infrastructure

- Disciplined approach and accountable for delivering client performance
- Shared philosophy and a long-term focus on generating alpha

Our ownership enhances our business

- One of the highest rated and largest banks in the world*
- Investment in our business has allowed for funding new product development, capital for key hires and strategic acquisitions

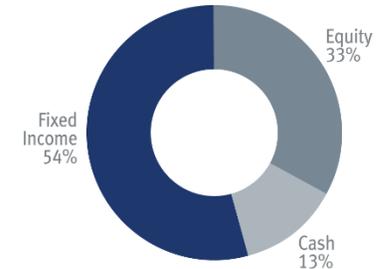
*Ratings: **S&P: AA-**, **Moody's: Aa3** (Bloomberg, 3.31.17). **Ranked 5th largest bank in North America and 11th globally based on market capitalization** (Bloomberg, 3.31.17). All other data in US dollars as of 3.31.17.

**By client location

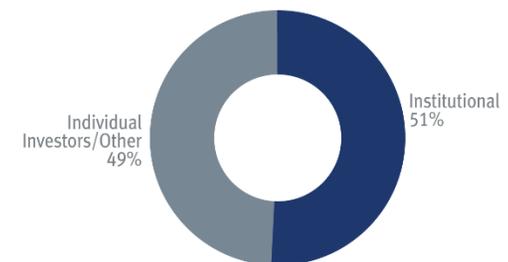
RBC Global Asset Management ("RBC GAM") is the asset management division of Royal Bank of Canada ("RBC") which includes RBC Global Asset Management (U.S.) Inc. ("RBC GAM-US") and several separate, but affiliated corporate entities. Refer to Disclosures page for more information on RBC GAM and its affiliates.

Over \$290 billion in AUM

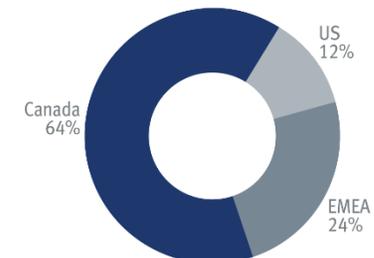
By Asset Class



By Client Type



By Geographical Location**



Our Global Presence

RBC Global Asset Management

Minneapolis
US Fixed Income

Boston
US Equities
Impact Investing

Chicago
US Equities

Vancouver
PH&N
Canadian Equities
Canadian Fixed Income
High Yield Bonds

Toronto
Canadian Equities
Global Resources/
Precious Metals

BlueBay
Global Credit
Alternatives

London
Emerging Market Equities
Global Equities
European Equities

Hong Kong
Asian Equities



- 18 specialist investment teams
- Diverse and global set of investment capabilities
- Strengthened by access to global tools and resources

- Over 300 investment professionals
- Over 50% institutional assets

Not all strategies are available in the US

As of 3.31.17

Emerging Markets Equity Team



Investment Team

Centralized, Research-Focused

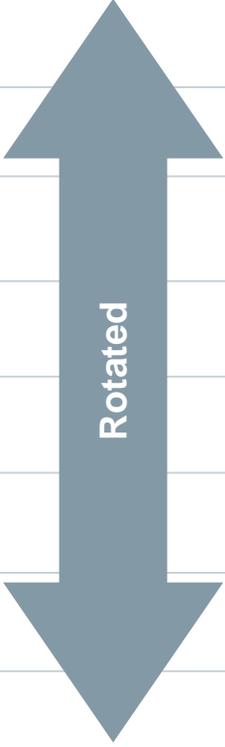


As of 3.31.17



Investment Team

Geographical Specialization, Sector Research Rotation

	Weekly & Monthly Meetings	Geographic Focus	Sector & Theme	Global Sector Research
Philippe Langham	✓	GEM	Healthcare	
Laurence Bensafi	✓	GEM	Telecoms	
Guido Giammattei	✓	Taiwan & Malaysia	Digitalization	
Veronique Erb	✓	China & Korea	Frontier Markets	
Zeena Dahdaleh	✓	EEMEA, SE Asia & Frontier	Consumer	
Richard Farrell	✓	Russia & China	Software & Services	
Mustafa Boulhabel	✓	Latin America	Financials	
Christoffer Enemaerke	✓	India	Automation	

As of 3.31.17

Investment Philosophy, Process and Research

Emerging Markets Equity Overview

Philosophy, Style, Process and Construction

Investment Philosophy	<ul style="list-style-type: none">• Companies with sustainably high cash flow return on investment (CFROI®) produce superior returns
Investment Style	<ul style="list-style-type: none">• Emphasis on Quality and Growth at a Reasonable Price• Fundamental research-focused approach drives decision making
Investment Process	<ul style="list-style-type: none">• Distinctive and thorough top-down thematic research drives sector views• In-depth and rigorous company-level research drives security selection
Portfolio Construction	<ul style="list-style-type: none">• High conviction portfolio• Focus on position sizing, client guidelines and risk management• 60%-80% contribution from stock selection: 20%-40% from top down themes

CFROI® is an approximation of the economic return, or an estimate of the average real internal rate of return, earned by a firm on the portfolio of projects that constitute its operating assets. HOLT® and CFROI® are trademarks of Credit Suisse Group AG or its affiliates.

Philosophy

Why is a High CFROI® So Important?

Six Steps to Identify Sustainably High CFROI®

Strong Management Team

Industry Dominance

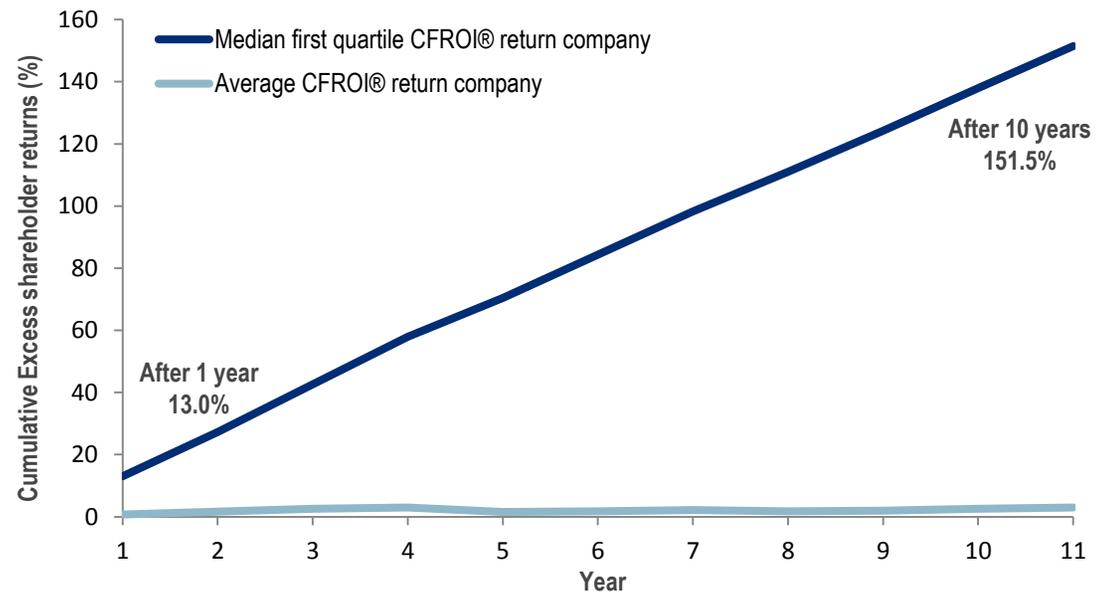
Strong Balance Sheet

High Free Cash Flow Generation

High Profitability

ESG* Considerations

Positive CFROI® Produces Compounded Shareholder Return



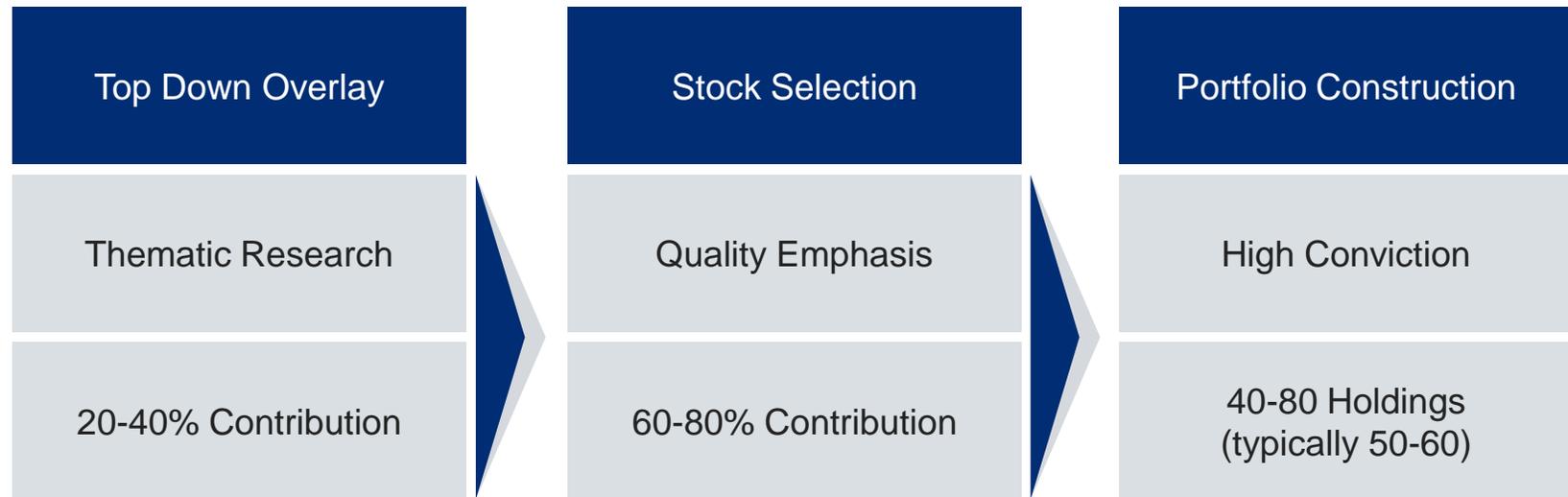
Source: Credit Suisse HOLT®, RBC Global Asset Management UK Ltd. 11 year period ending 7.8.15.

*Environmental, Social and Corporate Governance

Excess Shareholder Return is the excess cash return generated by a company over the cost of capital and was calculated based on a universe of the companies in the Credit Suisse HOLT® database with a market cap above \$1B. The graph shows the median excess shareholder return of those companies who achieved top quartile CFROI® in all 11 years against the median excess shareholder return of those companies in the middle tercile of companies CFROI® over the 11 year period.

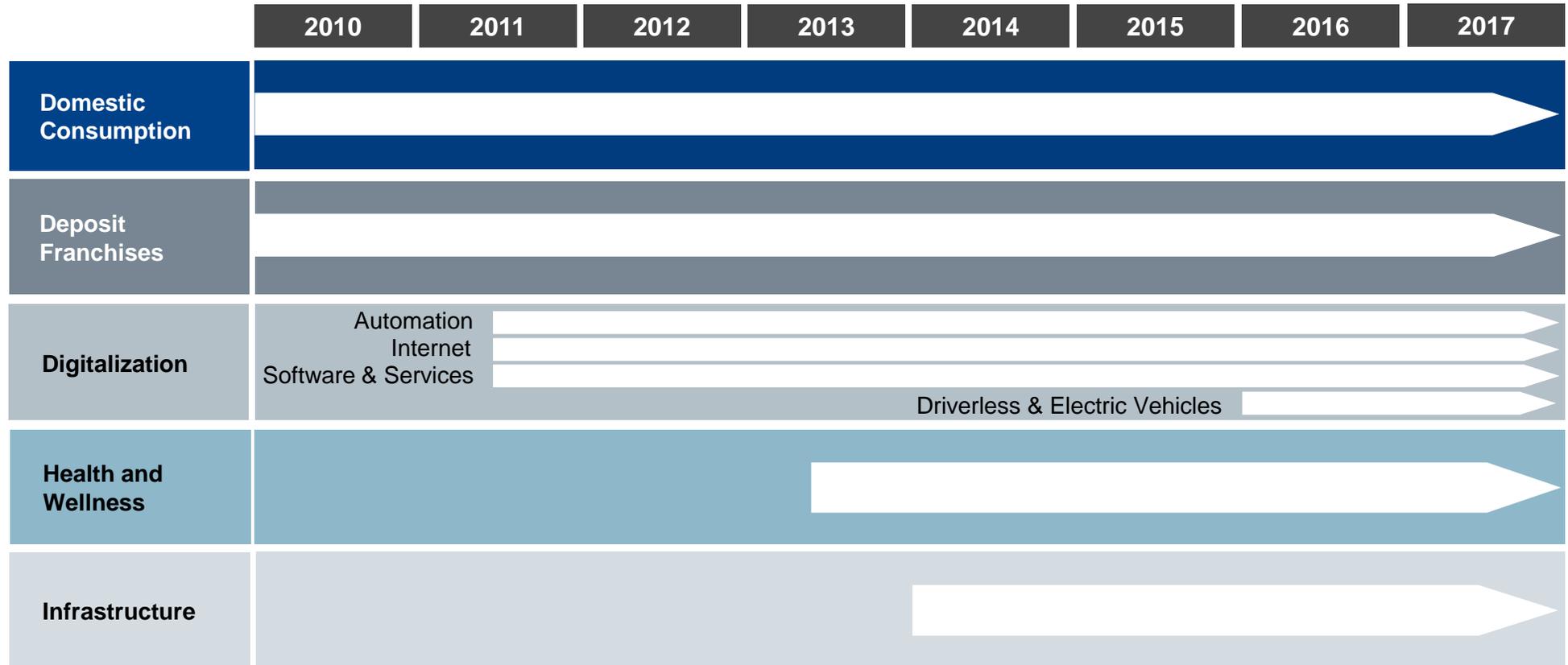
Investment Process

Integrated Approach



Portfolio Construction

Long-term Thematic Research Drives Top-down Views



As of 3.31.17



Investment Process – Bottom Up Stock Selection

Idea Generation and Fundamental Analysis

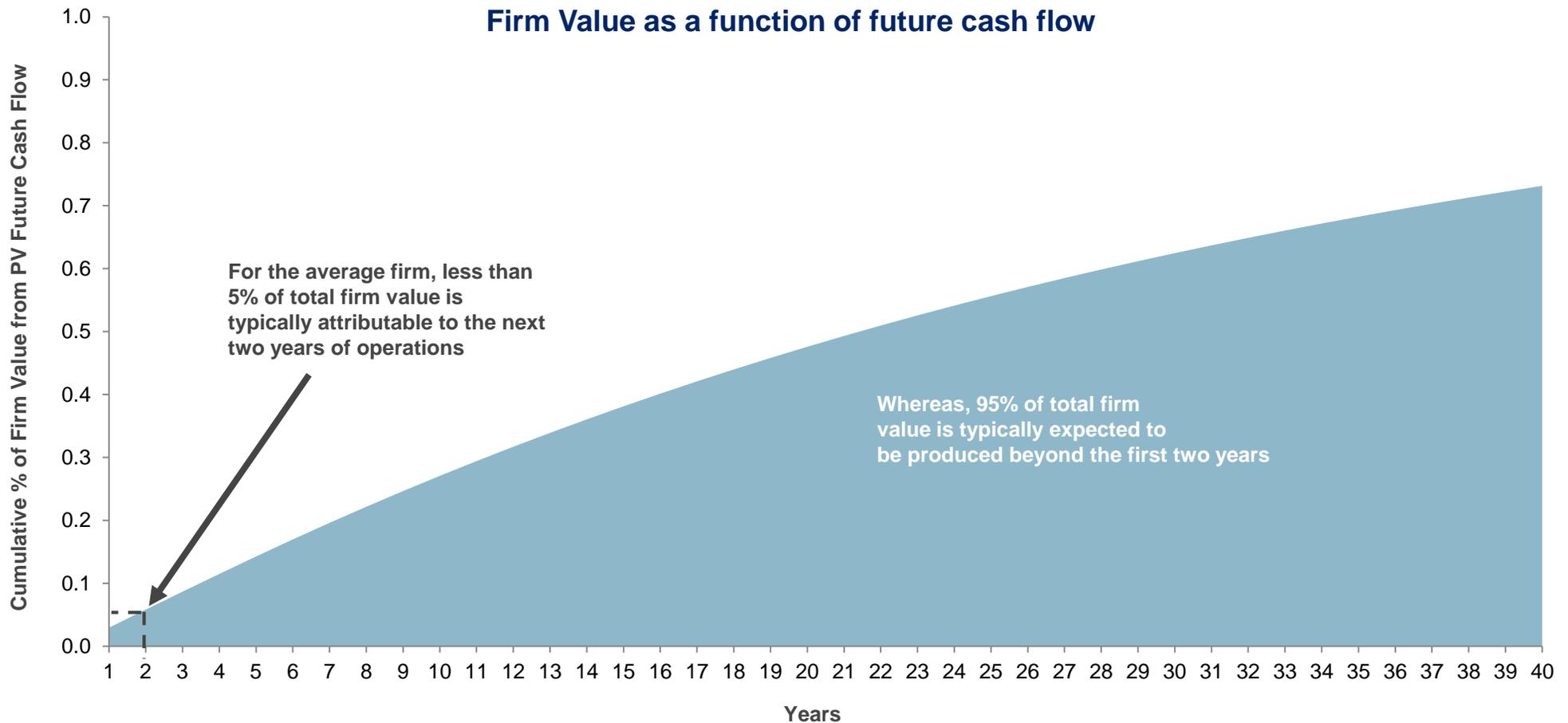
Idea Generation	
Proprietary Research	Quantitative Screening
<ul style="list-style-type: none">• In-depth market knowledge and team expertise• Top down thematic research• Management meetings• Industry contacts• Relevant publication review• Industry peers• Best sustainability practices	<ul style="list-style-type: none">• 45%: CFROI[®] and sustainability• 35%: CFROI[®] valuation• 20%: C/F growth and momentum



Fundamental Analysis
<ul style="list-style-type: none">• Company meetings• In depth research• Valuation analysis• Buy note• Checklist

Investment Process – Valuation

Only 5% of Fair Value Typically Attributable to Next Two Years



Source: Credit Suisse HOLT®

Percent of firm value derived from the cash flow of a typical company from the Credit Suisse HOLT® universe with 25% working capital, asset life of 10 years, growth of 2.5% and CFROI® equal to its cost of capital at 6%. CFROI® is an approximation of the economic return, or an estimate of the average real internal rate of return, earned by a firm on the portfolio of projects that constitute its operating assets.

Emerging Markets Equity Research Process

Independent, In-House Research

Research Process Supports Our Investment Philosophy & Process

Long Term	Global	Management	ESG ¹ Factors
<ul style="list-style-type: none">• Take a long term perspective (sell side analysts usually base their analysis on short-term drivers)	<ul style="list-style-type: none">• Take a global perspective• Identify investable themes• Leverage knowledge and expertise as a global team through ongoing team discussions	<ul style="list-style-type: none">• Focus on the quality of management• Checklist approach focuses on management's integrity and corporate governance issues	<ul style="list-style-type: none">• Focus on key aspects of a business that are often overlooked

¹ Environmental, Social and Corporate Governance.

Emerging Markets Equity Research Process

Bottom-up Fundamental Research

1

Initial Company Research / Preparation



The information provided is to illustrate the investment process for the Emerging Markets Equity strategy and is not a recommendation of any security or other financial instrument.

Emerging Markets Equity Research Process

Bottom-up Fundamental Research

2 Company Meeting

SAMPLE QUESTIONS FOR MANAGEMENT

Franchise

- What is the company's long-term vision and strategy for the China and Taiwan businesses? How should we view the revenue breakdown between China and Taiwan in the long-term?
- How do you view the competitive environment in both of these markets? How do you differentiate yourself from competitors? How high are the barriers to entry?
- Could you discuss the company's strategy in terms of launching new products and innovation in general? How do you decide which opportunities to pursue and where to commit capital (specific return requirements, hurdle rates etc.)?
- How do you think about R&D and how much will be spent on this area in the future?
- Returns on capital have been strong and stable for many years; what are the key reason behind this? What is likely to happen to returns on capital for the company in the long run?
- How much do you see the company benefitting from the health and wellness trends in Asia?
- Does the company have an e-commerce strategy? Do you see it as an opportunity or as a threat?

Management

- What is the culture like? How is it different to competitors?
- Does the company have a succession plan in place? Your son is running the China operations; how much communication is there between you and your son? Is your son likely to eventually be your successor?
- How do you think about the importance of stakeholder relationships, in particular when it comes to suppliers and distributors? How dependent are these relationships on the founder and the key senior management?
- What is the company's strategy when it comes to sustainability and ESG?
- How do you attract and engage employees/talent? How loyal are the employees to the company and to the founder of the company?
- How is senior management incentivized? What are the key management KPIs?
- What do you view as the biggest risks for the company's performance longer-term? Do you see any regulatory risks? Have you experienced delays in approval for product launches?
- Have you made any mistakes in the past? What have you learned from these?

Competitive Advantage

Long Term Strategic Direction

Employee Engagement

Competitive Environment

Management Remuneration

Importance of Sustainability

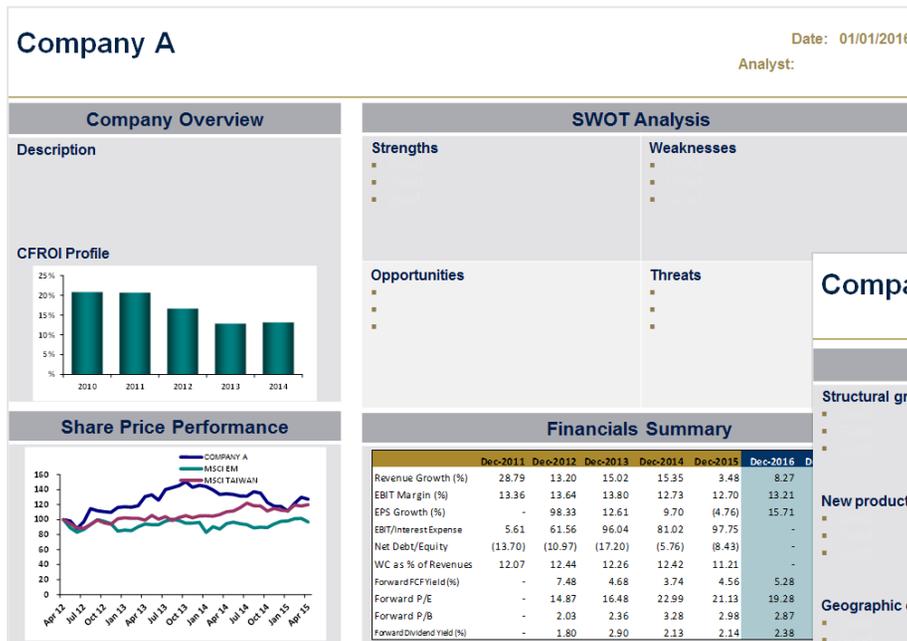
The information provided is to illustrate the investment process for the Emerging Markets Equity strategy and is not a recommendation of any security or other financial instrument.

Emerging Markets Equity Research Process

Bottom-up Fundamental Research

3

Portfolio Buy Notes



The information provided is to illustrate the investment process for the Emerging Markets Equity strategy and is not a recommendation of any security or other financial instrument.

Emerging Markets Equity Research Process

Bottom-up Fundamental Research

4

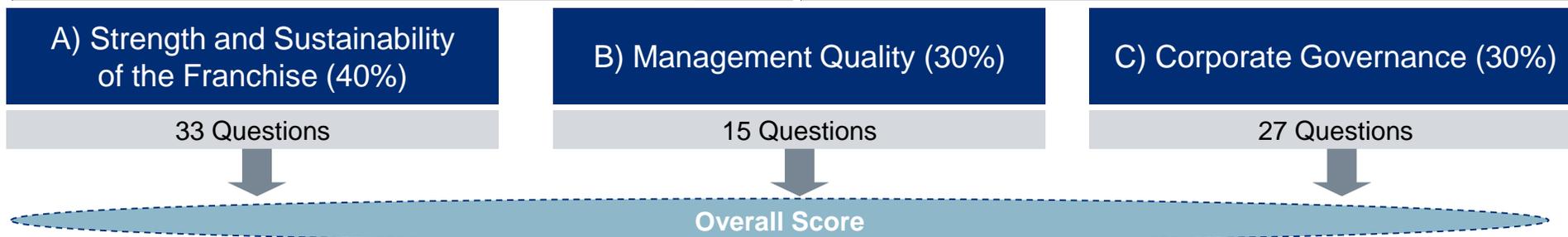
Checklist and Scoring

Ticker:	Company A Ticker
Name:	Company A
Date:	27/04/2016
FYE:	
Acc. Std.:	
Filled by:	

80 - 100	Excellent
60 - 80	Good
40-60	Neutral
0 - 40	Poor

Overall Score
87.4

STRENGTH AND SUSTAINABILITY OF FRANCHISE		88	MANAGEMENT QUALITY		87
1	Will the company be around in 20 years time?		1	What is management's track record of integrity?	
2	Does the company generate sector/industry leading returns?		2	What is the management's track in terms of creating shareholders value?	
3	What's the projected trajectory of returns? Is there any potential for return expansion or contraction?		3	What are the management KPIs? Are incentives aligned to support shareholder returns?	
4	What is the source and how sustainable is the competitive advantage?		4	How have they handled negative issues in the past and how quickly have they identified and rectified challenges?	
5	Do the company's products have a positive impact on society and environment?		5	What is management's execution track record through cycles?	
6	Are products being produced in a manner causing minimal harm to the environment?		6	How innovative is the culture of the firm and management?	
7	Do the company's products and/or services represent good value for money to the consumer?		7	Is the company addressing all key stakeholders? How are all the stakeholders of the business treated?	
8	How easy is it substitute the company's products?		8	How do they engage employees?	

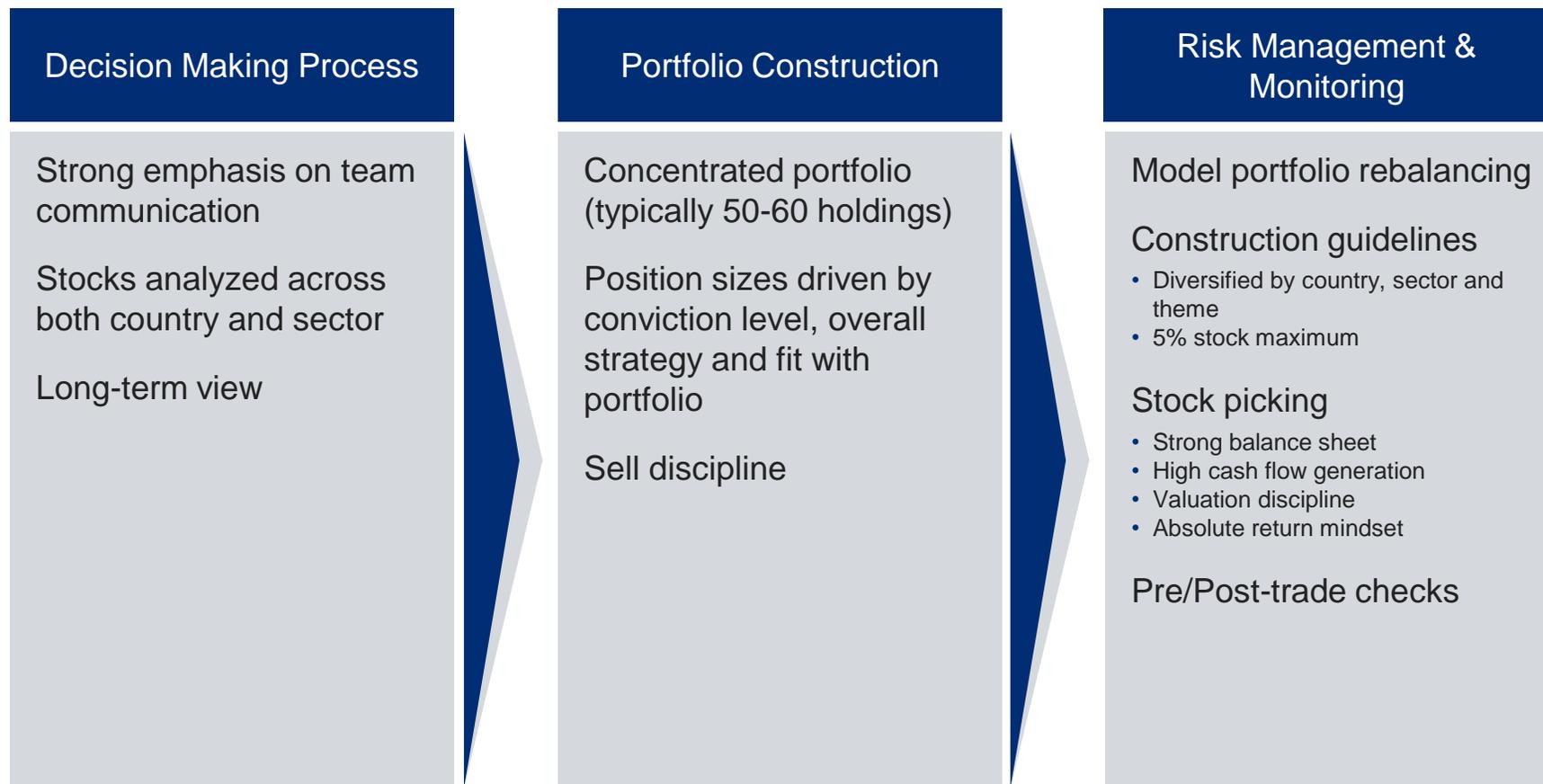


The information provided is to illustrate the investment process for the Emerging Markets Equity strategy and is not a recommendation of any security or other financial instrument.



Portfolio Construction

Robust and High Conviction Process

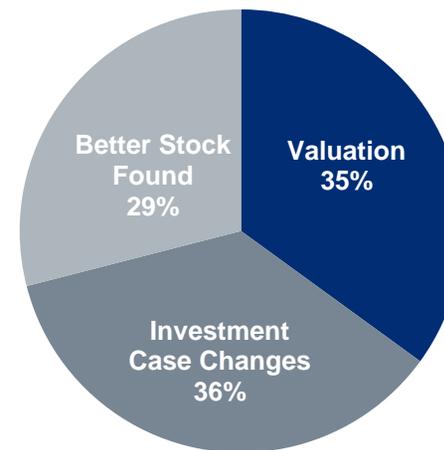


Sell Discipline – Three Reasons to Sell

Emerging Markets Equity



Breakdown of Decisions Since Inception



As of 3.31.17

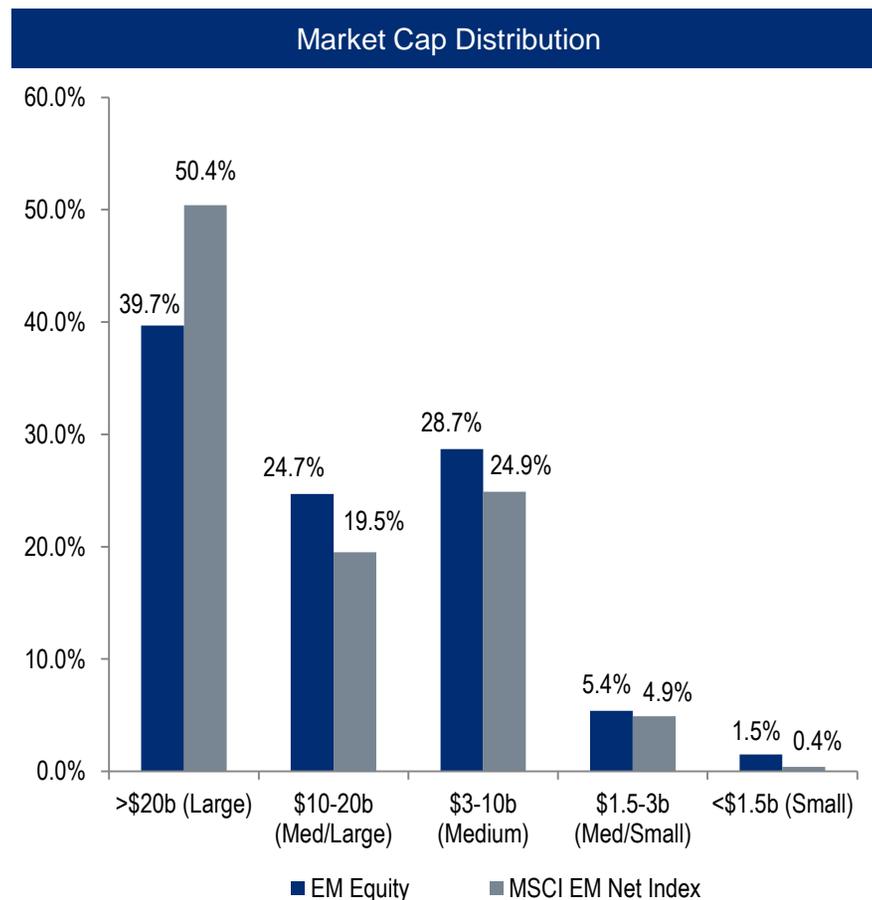
Supplemental information complements the Emerging Markets Equity composite and is derived from a representative account of this strategy. Representative account inception: 4.1.2010.

Characteristics and Performance

Portfolio Characteristics

Emerging Markets Equity

	EM Equity	MSCI EM Net
Valuation		
EBITDA Margin (ex Financials)	27.3%	17.7%
Profitability		
Return on Equity (Trailing 12 Months)	14.4%	11.0%
Return on Assets (Trailing 12 Months)	3.4%	2.1%
EPS Volatility	1.5	1.7
Risk		
Net Debt/EBITDA (ex Financials)	-0.9x	1.4x
Other		
12-Month Turnover	17.5%	N/A
Number of Holdings (ex Cash)	53	830
Active Share	79.6%	N/A

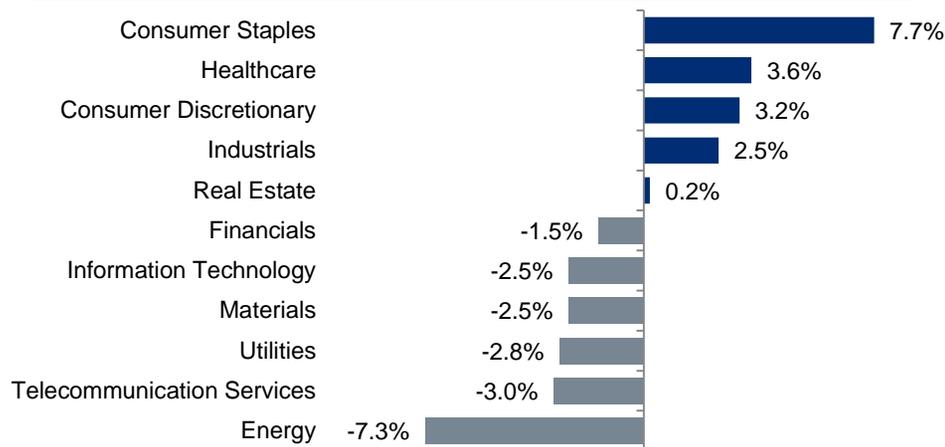


As of 3.31.17
 Source: Bloomberg, MSCI & FactSet. Past performance is not a guarantee of future results. Supplemental information on this page complements the Emerging Markets Equity Composite presentation as provided in the "GIPS® Compliant Presentation" appendix to these materials. Portfolio characteristics are based on a representative account. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings.

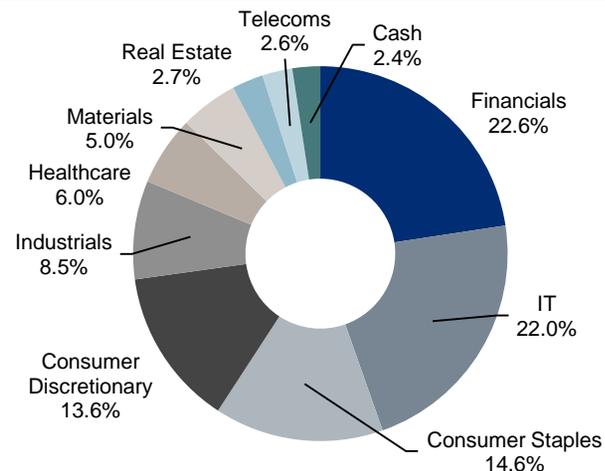
Sector and Country Weights

Emerging Markets Equity

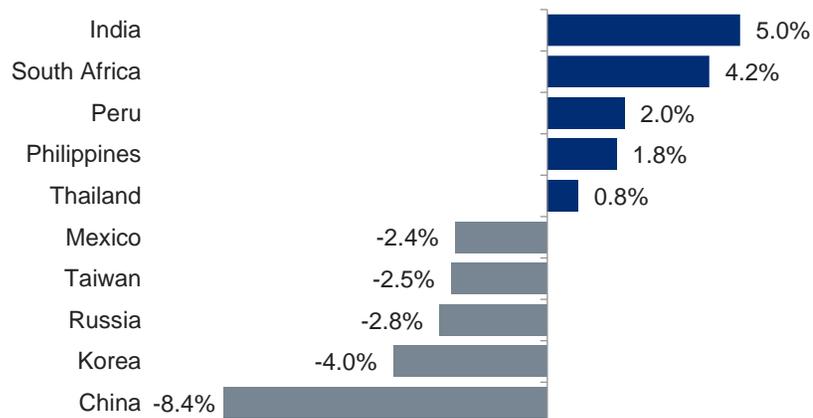
Relative Sector Weights



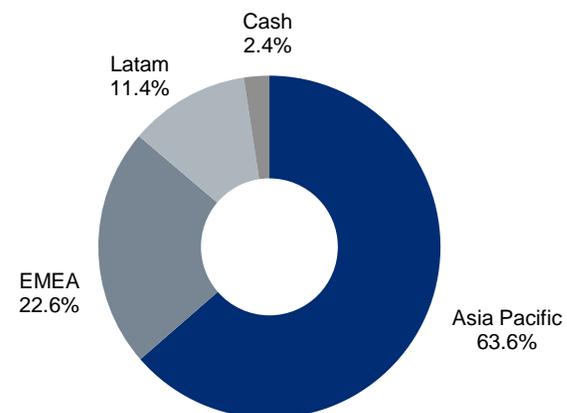
Sector Allocation



Relative Country Weights¹



Regional Allocation

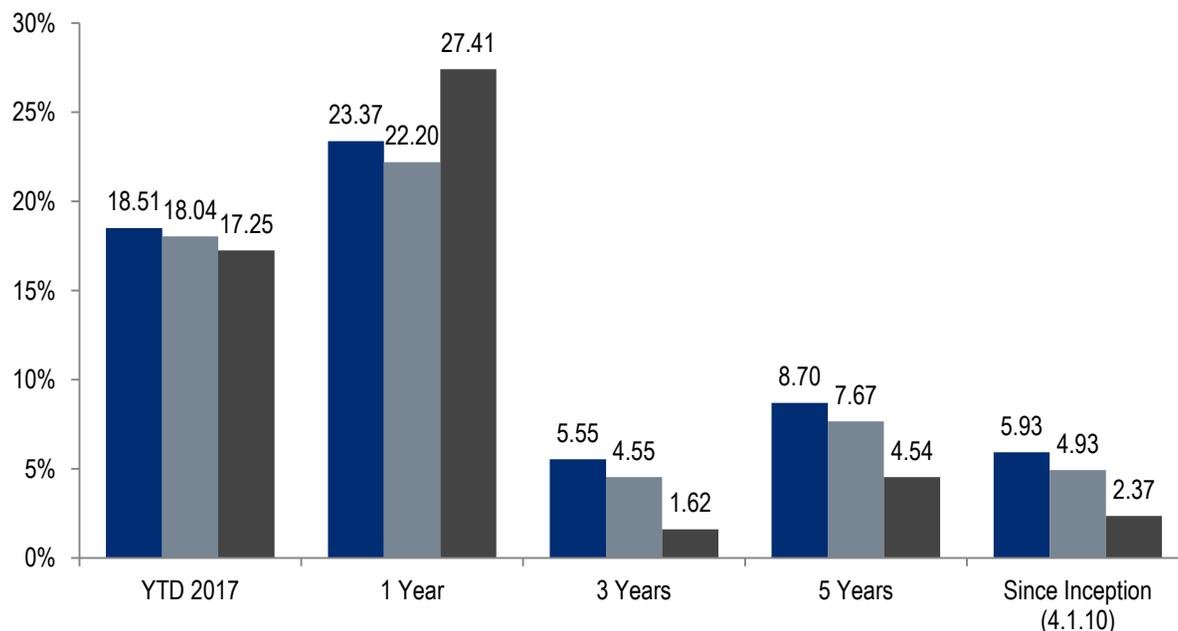


As of 3.31.17. ¹Top and bottom 5 relative weights for benchmark countries. Hong Kong is included as part of the overall China allocation although not all Hong Kong companies are MSCI EM index constituents. Benchmark: MSCI EM Net Index. Source: MSCI and RBC Global Asset Management. Supplemental information on this page complements the Emerging Markets Equity Composite presentation as provided in the "GIPS® Compliant Presentation" appendix to these materials and is derived from a representative account of this strategy.

Investment Performance and Risk

Emerging Markets Equity

Investment Performance as of May 31, 2017



Value Added

	YTD 2017	1 Year	3 Years	5 Years	Since Inception (4.1.10)
Gross	+1.26%	-4.04%	+3.93%	+4.16%	+3.56%
Net	+0.79%	-5.21%	+2.93%	+3.13%	+2.56%

■ Emerging Markets Equity (Gross) ■ Emerging Markets Equity (Net) ■ MSCI EM Net Index

Risk Characteristics (3 Years)

Return	
Portfolio	5.6%
Benchmark	1.6%
Standard Deviation	
Portfolio	13.0%
Benchmark	15.9%
Sharpe Ratio	
Portfolio	0.4
Benchmark	0.1
Information Ratio	
Portfolio	0.8

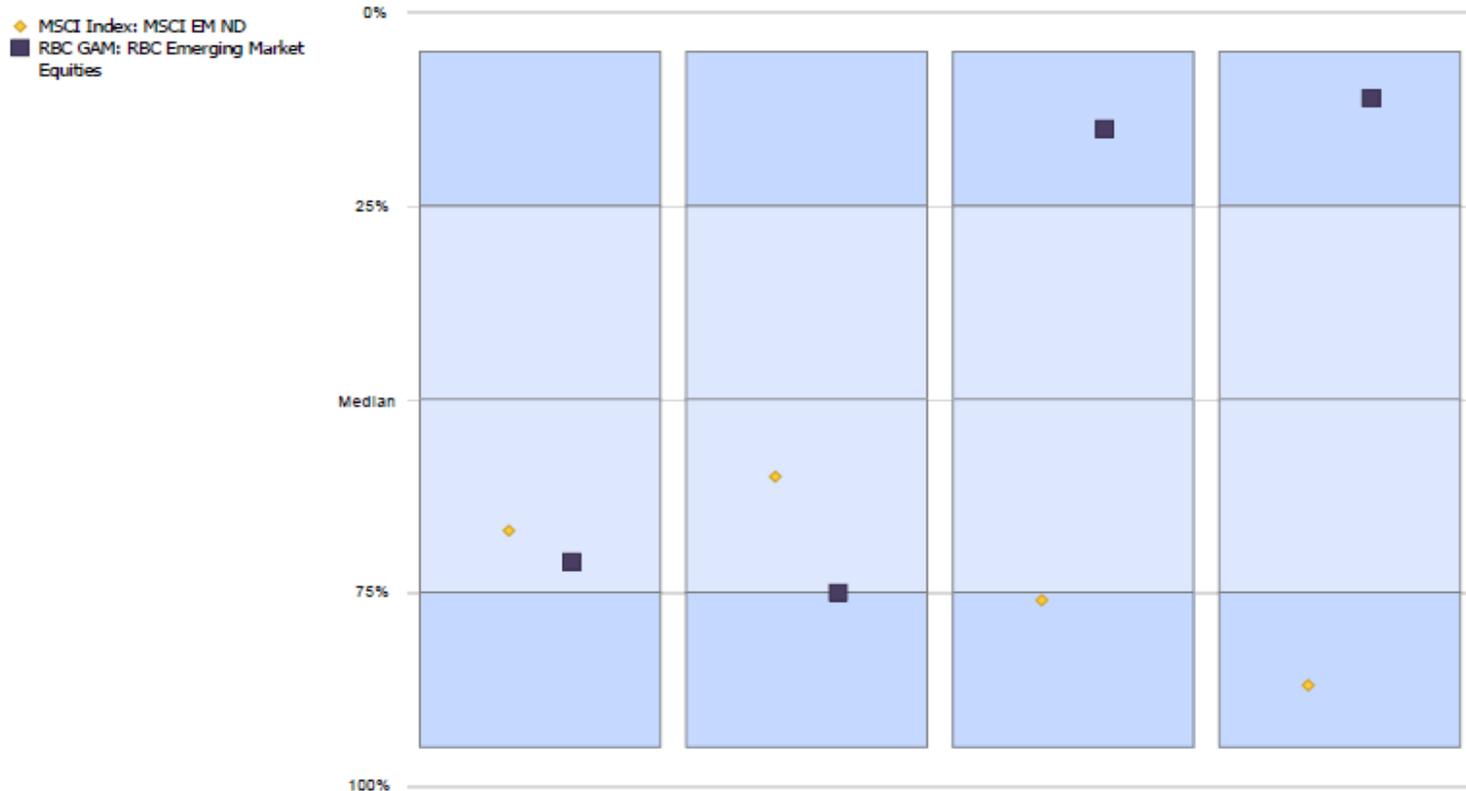
As of 5.31.17

Source: MSCI

Benchmark: MSCI EM Net Index. Past performance is not indicative to future results. Returns are presented gross and net of fees and include the reinvestment of all income. Gross returns do not reflect the deduction of management fees. Client returns will be reduced by advisory fees and other expenses. Inception of the performance record is 4.1.10. The Emerging Markets Equity composite is presented as supplemental to the "GIPS® Compliant Presentation" appendix to these materials. The appendix contains additional disclosures and important information regarding calculation of performance data.

Investment Performance Versus Peer Group

Emerging Markets Equity



Universe: eVestment Emerging Mkts All Cap Equity

	VT	RM	MRQ		1 Year		3 Years		5 Years	
				Rk		Rk		Rk		Rk
◆ MSCI EM ND	K	K	11.45	67	17.22	60	1.18	76	0.81	87
■ RBC Emerging Market Equities	SA	GF	11.34	71	14.85	75	5.09	15	5.06	11

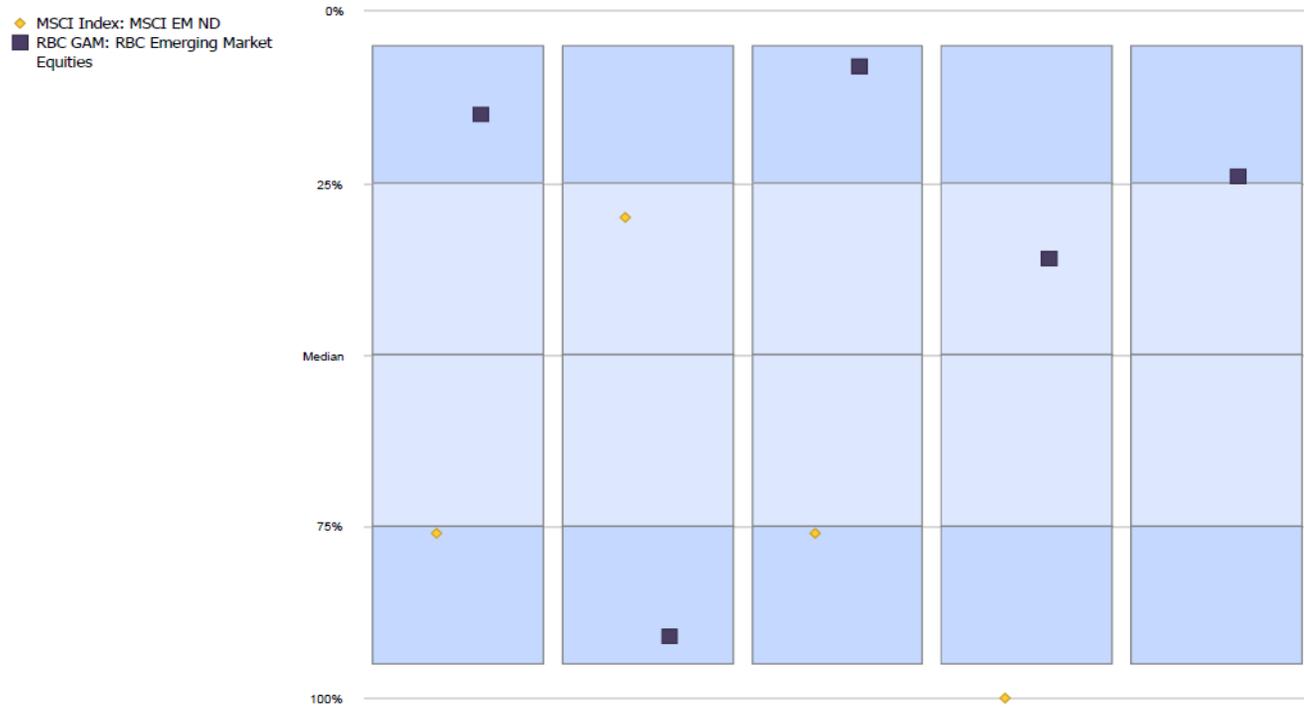
As of 3.31.17. Past performance is not indicative of future results. Returns are presented gross of management fees and include the reinvestment of all income. All returns for periods greater than one year are shown on an annualized basis. Information presented is supplemental to the "GIPS® Compliant Presentation" appendix to these materials. eVestment Alliance, LLC and its affiliated entities (collectively, "eVestment") collect information directly from investment management firms and other sources believed to be reliable, however, eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and is not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable. All categories not necessarily included, Totals may not equal 100%. Copyright 2012-2016 eVestment Alliance, LLC. All Rights Reserved.



Trailing 3 Year Risk Statistics

Emerging Markets Equity

- Top quartile 3 year returns coupled with bottom decile volatility



Universe: eVestment Emerging Mkts All Cap Equity

	VT	RM	Returns 3 Years		Standard Deviation 3 Years		Sharpe Ratio 3 Years ²		Tracking Error 3 Years ¹		Information Ratio 3 Years ¹	
				Rk		Rk		Rk		Rk		Rk
◆ MSCI EM ND	K	K	1.18	76	16.11	30	0.06	76	0.00	100	—	—
■ RBC Emerging Market Equities	SA	GF	5.09	15	13.16	91	0.38	8	5.34	36	0.73	24

As of 3.31.17. Past performance is not indicative of future results. Returns are presented gross of management fees and include the reinvestment of all income. All returns for periods greater than one year are shown on an annualized basis. Information presented is supplemental to the "GIPS® Compliant Presentation" appendix to these materials. eVestment Alliance, LLC and its affiliated entities (collectively, "eVestment") collect information directly from investment management firms and other sources believed to be reliable, however, eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and is not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable. All categories not necessarily included, Totals may not equal 100%. Copyright 2012-2016 eVestment Alliance, LLC. All Rights Reserved.



Summary



RBC Global Asset Management

Emerging Markets Equity

- Distinctive Approach
 - A focus on sustainably high CFROI[®] companies
 - Distinctive blend of top down thematic and fundamental company research
 - Centralized team dedicated to proprietary and differentiated research
 - ESG* built into the process
 - High conviction, quality-biased, long-term portfolio

**Environmental, Social and Corporate Governance*

Appendix



RBC Global Asset Management

Emerging Markets Equity

	EM Equity
Lead Manager	Philippe Langham
AUM	\$3,157m
Objectives	3% outperformance of benchmark*
Benchmark	MSCI Emerging Markets Net Index
Strategy Launch	April 2010
Team Location	London

As of 3.31.17

*Relative to the MSCI EM Net Index (before fees)

Portfolio Holdings by Sector

Emerging Markets Equity

Consumer Discretionary

Fuyao Glass
Giant Manufacturing
Hanon Systems
Hero Motocorp
Mr Price Group
Naspers
Samsonite International
Weifu

Consumer Staples

Amore Pacific
Clicks Group Limited
Compania Cervecerias Unidas
Kimberly-Clark de Mexico SAB
Magnit
Natura Cosmetics
Standard Foods
Uni-President Enterprises
Unilever

Financials

AIA Group Limited
Banco Bradesco
Bank Central Asia
Central Pattana Public
China Resources Land
Credicorp
Emaar Malls
Firststrand
Guaranty Trust Bank
HDFC
Public Bank
Samsung Fire & Marine Insurance
Shinhan Financial Group
SM Investments

Health Care

Dr Reddy's Laboratories
Hikma Pharmaceuticals
Kalbe Farma

Industrials

China Merchants Holdings
Cummins India
Enka Insaat ve Sanayi
WEG S.A.

Information Technology

Alibaba Group Holding
Baidu
Delta Thailand
Hangzhou Hikvision
HCL Technologies Limited
Infosys
Mediatek
Samsung Electronics
TOTVS
TSMC

Materials

Antofagasta
Mondi

Telecommunications

Axiata Group
China Mobile

As of 3.31.17

Portfolio holdings are based on a representative account. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy. Holdings less than 5 bps are not included in the above.

Portfolio Holdings by Country

Emerging Markets Equity

Brazil

Banco Bradesco
Natura Cosmetics
TOTVS
WEG

Chile

Antofagasta*
Compania Cervecerias Unidas

Hong Kong/China

AIA Group Limited
Alibaba Group Holding
Baidu
China Merchants Holdings
China Mobile
China Resources Land
Fuyao Glass
Hangzhou Hikvision
Samsonite International
Weifu

India

Cummins India
Dr Reddy's Laboratories
HCL Technologies
HDFC Limited
Hero Motocorp
Infosys

Indonesia

Bank Central Asia
Kalbe Farma

Jordan

Hikma

Korea

Amore Pacific
Hanon Systems
Samsung Electronics
Samsung Fire & Marine Insurance
Shinhan Financial Group

Malaysia

Axiata Group
Public Bank

Mexico

Kimberly-Clark de Mexico SAB

Nigeria

Guaranty Trust Bank

Peru

Credicorp

Philippines

SM Investments

Russia

Magnit

South Africa

Clicks Group
Firstrand
Mondi
Mr Price Group
Naspers

Taiwan

Giant Manufacturing
Standard Foods
TSMC
Uni-President Enterprises
Mediatek

Thailand

Central Pattana Public
Delta Thailand

Turkey

Enka Insaat ve Sanayi

UAE

Emaar Malls

United Kingdom

Unilever

As of 3.31.17

*This holding is listed in the UK, though its primary business is in Chile. Portfolio holdings are based on a representative account. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy. Holdings less than 5 bps are not included in the above.

Portfolio Holdings by Theme

Emerging Markets Equity

Deposit Franchises

Banco Bradesco
Bank Central Asia
Credicorp
Firststrand
Guaranty Trust Bank
Public Bank
Shinhan Financial Group

Digitalisation

Alibaba
Baidu
Delta Thailand
Hangzhou Hikvision
HCL Technologies
Infosys
Mediatek
Naspers
Samsung Electronics
TOTVS
TSMC
WEG

Domestic Consumption

Compania Cervecerias Unidas
Fuyao Glass
Hanon Systems
Hero Motocorp
Kimberly-Clark de Mexico
Magnit
Mr Price
S.M.Investment
Samsonite International
Uni-President Enterprises Corp
Unilever
Weifu

Health and Wellness

AIA Group Limited
Amore Pacific
Clicks Group Limited
Dr Reddy's Laboratories
Giant Manufacturing
Hikma Pharmaceuticals
Kalbe Farma
Natura Cosméticos
Samsung Fire & Marine Insurance
Standard Foods Corporation

Infrastructure

Antofagasta
Central Pattana
China Merchants Holdings
China Resources Land
Cummins India
Emaar Malls
Enka
HDFC
Mondi

No Theme

Axiata Group
China Mobile

As of 3.31.17

Themes are determined by the portfolio manager as part of the top-down overlay of the fundamental research process. They are subject to change at any given time. Portfolio holdings are based on a representative account. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy. Holdings less than 5 bps are not included in the above.

Checklist Scores

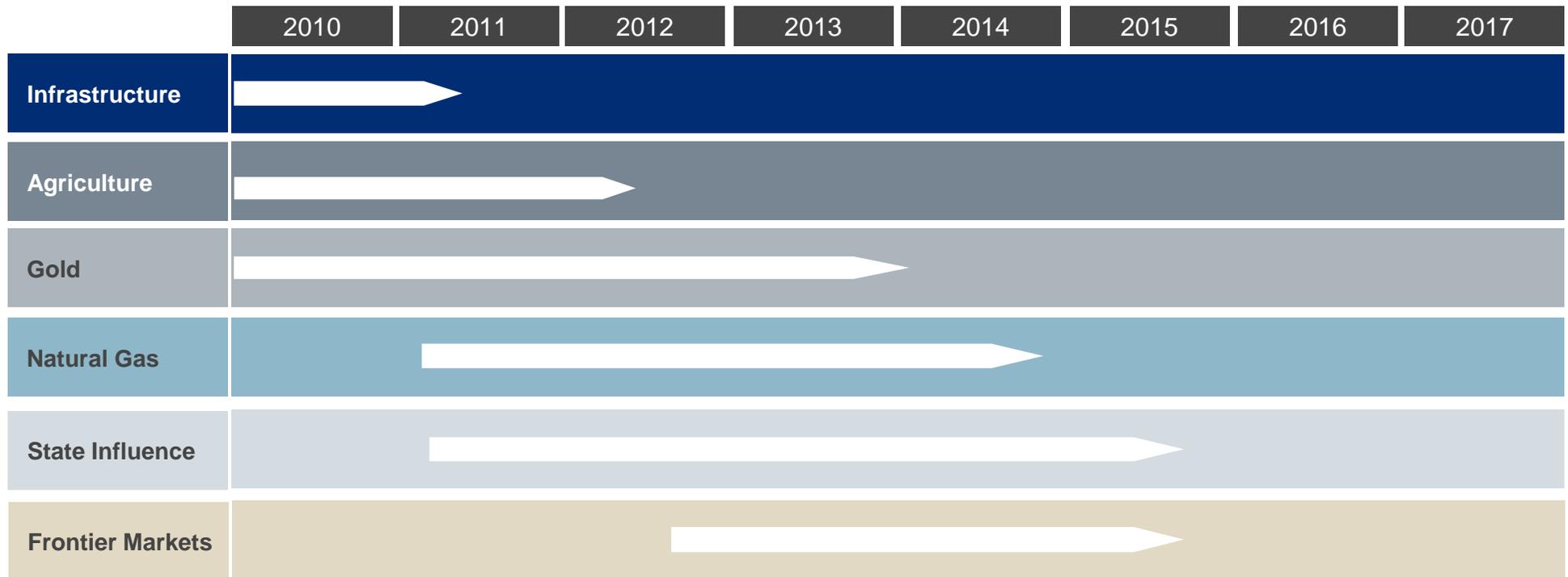
Emerging Markets Equity

Name	Checklist Scores				Name	Checklist Scores			
	Franchise	Mgmt Quality	Corporate Governance	Total		Franchise	Mgmt Quality	Corporate Governance	Total
TSMC	100	96	92	96.4	Alibaba	88	87	81	85.6
HDFC	95	95	95	95.0	Baidu	84	88	85	85.5
Unilever	97	93	94	94.9	HCL Tech	90	80	85	85.5
Infosys	92	95	95	93.8	CCU	86	80	90	85.4
Naspers	97	97	84	93.1	Weifu High Tech Group	82	87	88	85.3
AIA	90	95	95	93.0	China Merchants Holdings	81	87	87	84.6
SM Investments	94	94	90	92.8	Mondi	84	85	85	84.6
Dr Reddys Labs	90	95	92	92.1	Clicks	76	90	90	84.4
Firststrand	92	90	94	92.0	Hangzhou Hikvision	86	84	82	84.2
China Mobile	95	88	90	91.4	Enka	80	78	80	79.4
Delta Thailand	92	92	87	90.5	Natura	84	80	88	84.0
Banco Bradesco	85	93	93	89.8	Mediatek	82	85	85	83.8
Hikma	90	88	88	88.8	Central Pattana	82	82	87	83.5
Credicorp	88	88	90	88.6	Fuyao Glass	76	89	88	83.5
Public Bank	83	90	94	88.4	Axiata	80	82	88	83.0
Standard Foods	88	87	87	87.4	Kalbe Farma	76	84	88	82.0
Samsung Elec	90	95	75	87.0	Shinhan Financial	84	84	76	81.6
Antofagasta	85	91	85	86.8	Guaranty Trust Bank	81	83	80	81.3
BCA	84	90	87	86.7	Hero Motocorp	84	77	80	80.7
Giant	85	85	85	86.5	Hanon Systems	83	81	75	80.0
Magnit	85	90	85	86.5	Emaar Malls	84	80	75	79.9
Kimberley Clark de Mexico	87	82	90	86.4	Cummins	70	80	75	79.9
Amore Pacific	80	93	88	86.3	Weg	75	85	80	79.5
Totvs	88	80	90	86.2	Mr Price	76	77	86	79.3
Samsung Fire and Marine Ins	95	84	76	86.0					
China Res Land	87	86	85	85.5					
Samsonite	81	89	88	85.5					
Uni-President Enterprises	84	88	86	85.8					

As of 3.31.17
 Portfolio holdings are based on a representative account. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy.

Historical Portfolio Themes

Long-Term Thematic Research Drives Top Down Views



As of 3.31.17



Top Ten Holdings

Emerging Markets Equity

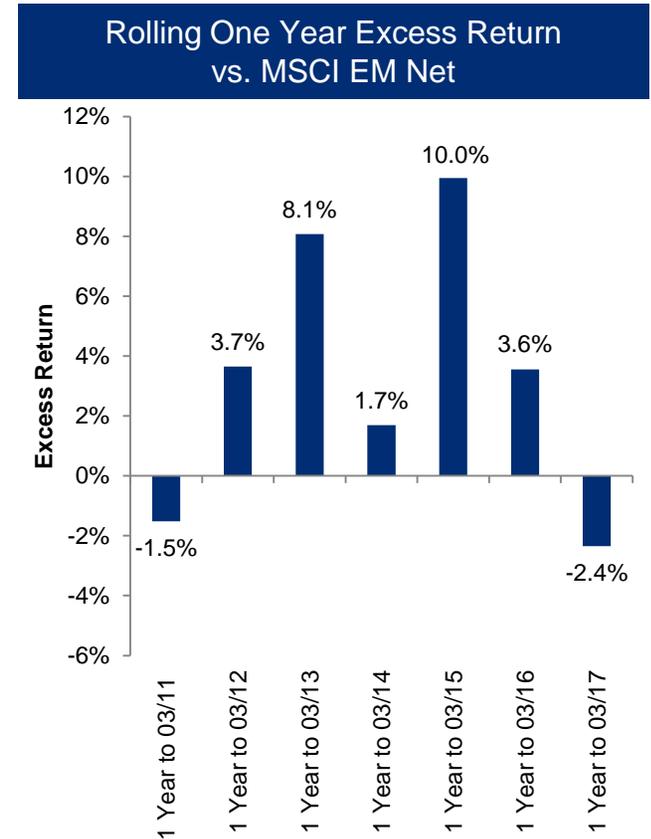
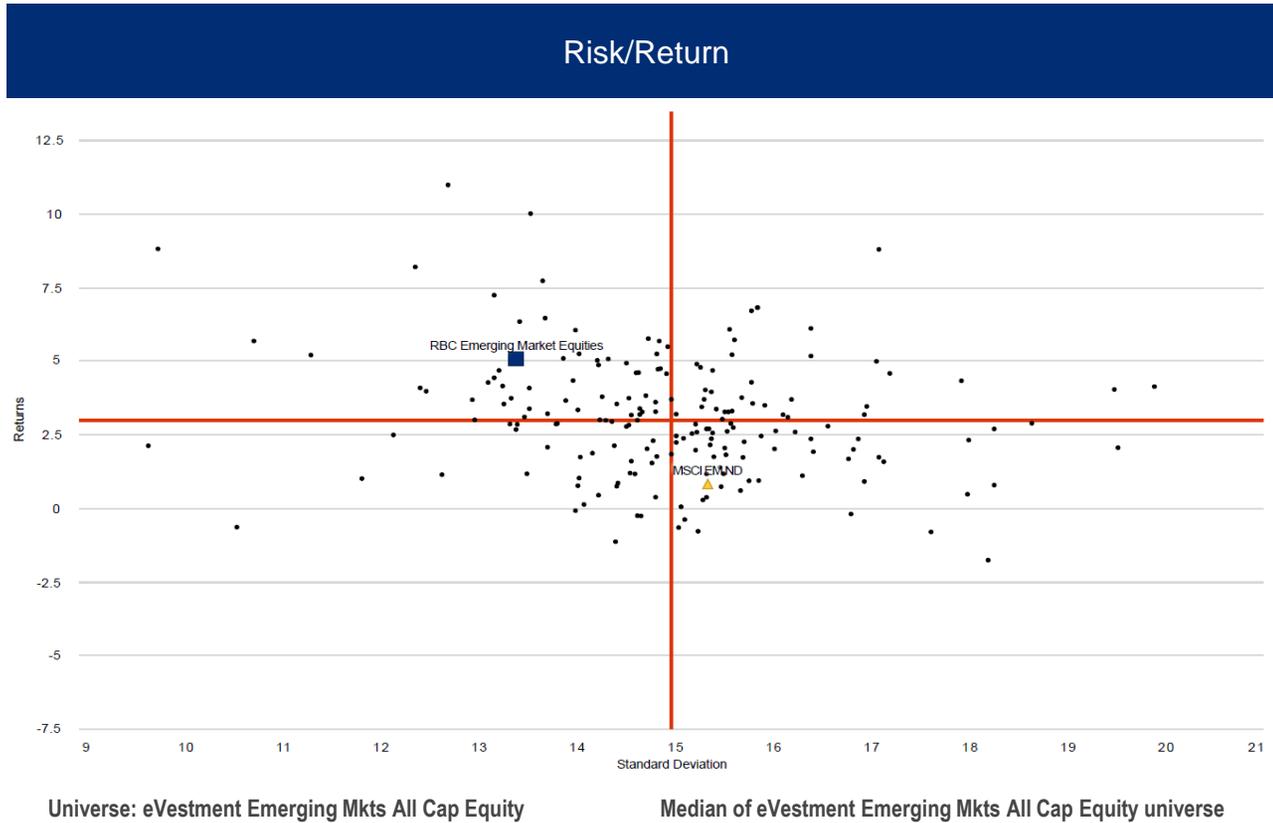
Top 10 Holdings		
Company	Country	%
HDFC	India	4.9
Samsung Electronics Co.	Korea	4.9
Naspers	South Africa	4.6
Taiwan Semiconductor	Taiwan	4.2
AIA Group	China	3.3
Dr. Reddy's Laboratories	India	3.2
Unilever PLC	United Kingdom	3.2
Antofagasta PLC*	United Kingdom	3.0
SM Investments Corp.	Philippines	2.9
Banco Bradesco	Brazil	2.9
TOTAL		37.1

As of 3.31.17

*Antofagasta Plc. Is a U.K. listed security whose primary business is in Chile. Portfolio holdings are based on the representative account, are subject to change, and should not be considered a recommendation to buy or sell any security. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. Supplemental information on this page complements the Emerging Markets Equity Composite presentation as provided in the "GIPS® Compliant Presentation" appendix to these materials.

Risk/Return & Rolling 1 Year Excess Return

Emerging Markets Equity



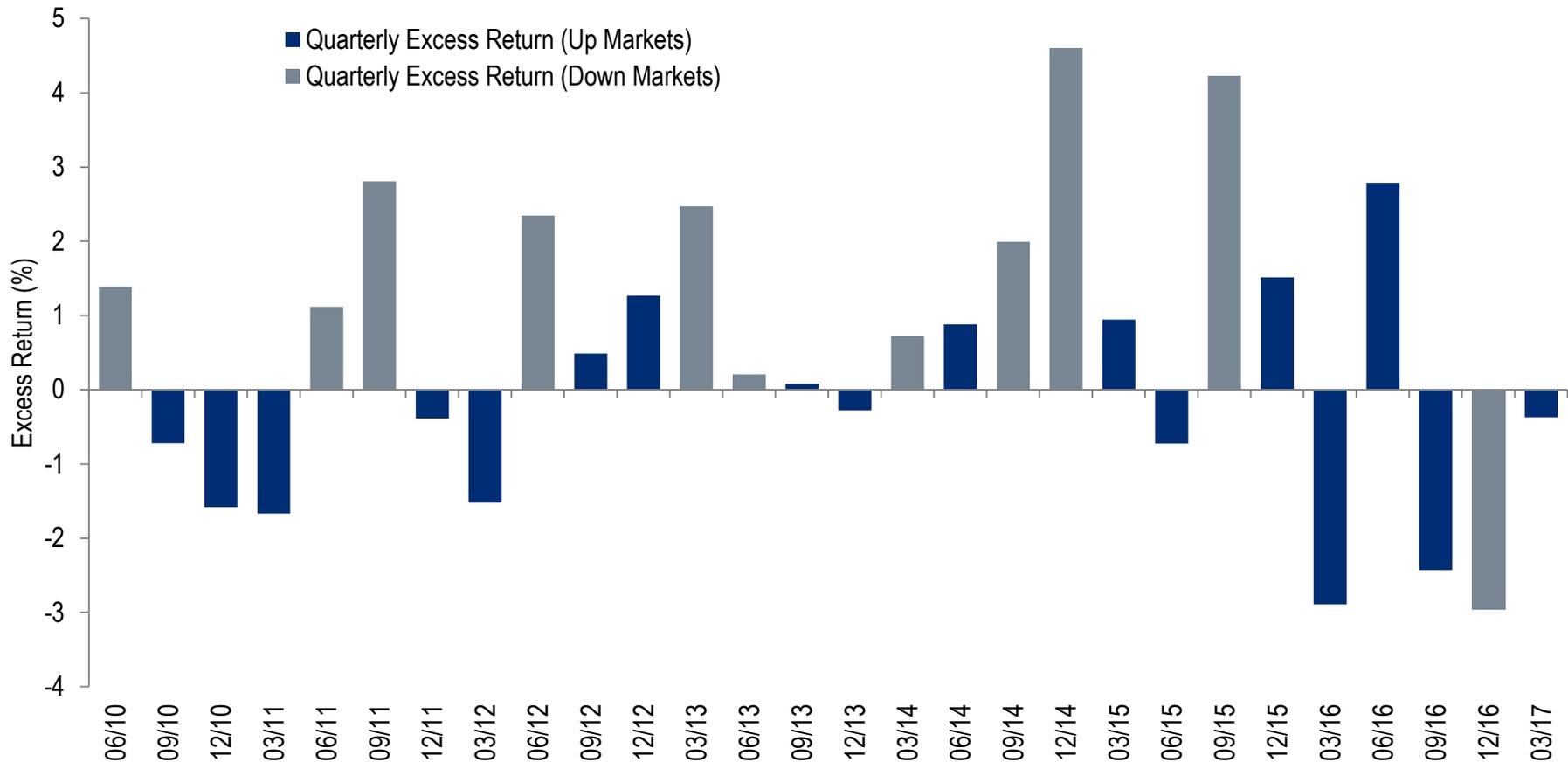
As of 3.31.17. Past performance is not indicative of future results. Returns are presented gross of management fees and include the reinvestment of all income. All returns for periods greater than one year are shown on an annualized basis. Information presented is supplemental to the "GIPS® Compliant Presentation" appendix to these materials. eVestment Alliance, LLC and its affiliated entities (collectively, "eVestment") collect information directly from investment management firms and other sources believed to be reliable, however, eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and is not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable. All categories not necessarily included, Totals may not equal 100%. Copyright 2012-2016 eVestment Alliance, LLC. All Rights Reserved.

Quarterly Excess Returns in Up and Down Markets

Outperformance in Different Market Environments

Emerging Markets Equity

Quarterly Excess Return vs. MSCI EM Net



Since strategy inception through 3.31.17

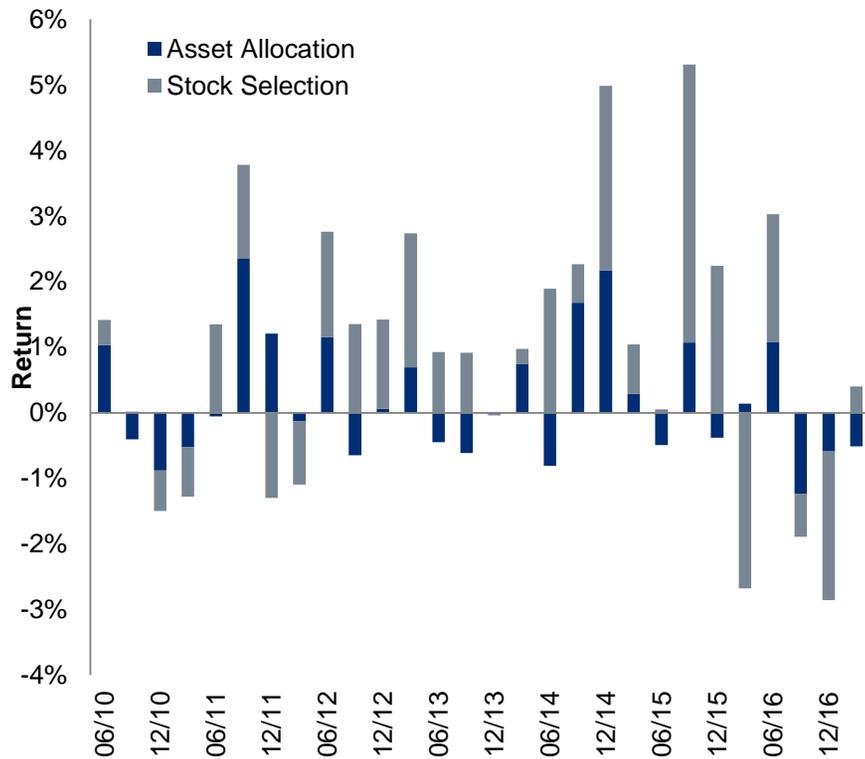
Source: MSCI, RBC GAM

Quarterly excess return in up and down markets¹ is the average (arithmetic mean) of excess returns observed during quarters when the return on the benchmark was positive (up market) or negative (down market). Past performance is not indicative of future results. Returns include the reinvestment of all income. All returns for periods greater than one year are shown on an annualized basis and have been rounded up. Performance and composite information presented is supplemental to the "GIPS® Compliant Presentation" appendix which contains additional information regarding calculation of performance data.

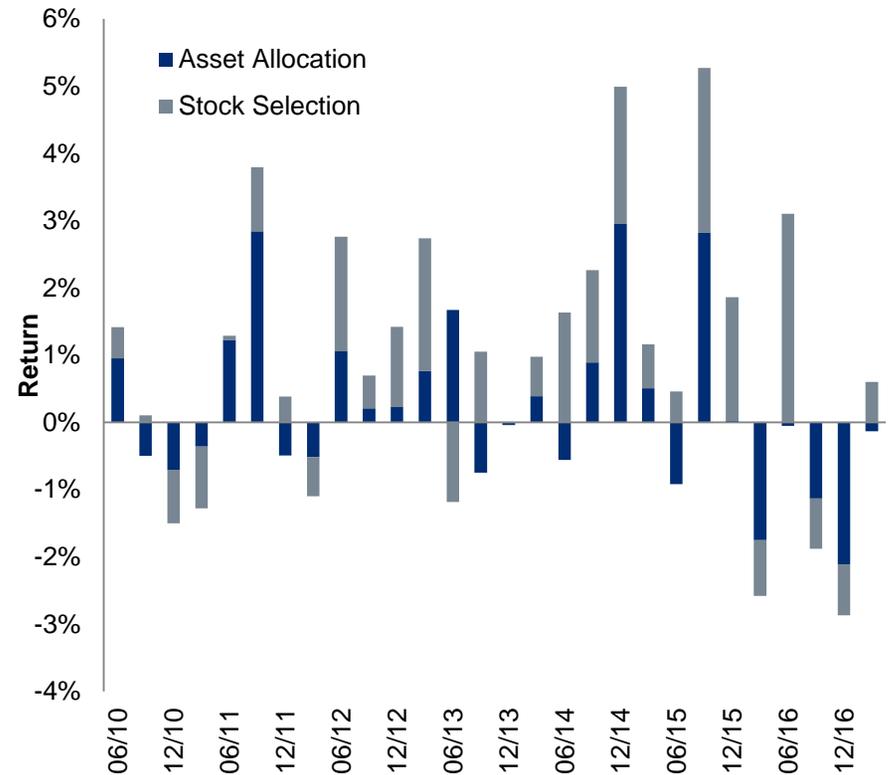
Attribution by Country & Sector

Emerging Markets Equity

Quarterly Attribution by Country



Quarterly Attribution by Sector



Since inception through 3.31.17

Source: RBC Global Asset Management

Attribution is based on the representative account in the composite and is supplemental to the "GIPS® Compliant Presentation" appendix which contains additional disclosures and important information regarding the performance of the composite. Such data may vary for each client in the strategy due to asset size, market conditions, client guidelines and diversity of portfolio holdings. The representative account is the account in the composite that most closely reflects the current portfolio management style for this strategy.

Investment Team

RBC GAM-UK



Philippe Langham, ACA

Senior Portfolio Manager, Head, Emerging Markets Equity

25 years of experience

Philippe is Head of the Emerging Markets Equity Team in London and lead manager for the Emerging Markets Equity and Emerging Markets Small Cap Equity Strategies. Philippe joined RBC Global Asset Management (RBC GAM) in 2009 to establish and lead the Emerging Markets Equity Team in London. He has worked in the investment industry since 1992 and prior to joining RBC GAM, Philippe was the Head of Global Emerging Markets at Société Générale Asset Management in London. Previously, Philippe managed the Global Emerging Markets, Asian, Latin American and US portfolios at the Kuwait Investment Office in London, and was Director and Head of Asia and Emerging Markets at Credit Suisse in Zurich. Philippe obtained a BSc in Economics from the University of Manchester in England, and is a Chartered Accountant.



Laurence Bensafi, CFA

Senior Portfolio Manager, Deputy Head, Emerging Markets Equity

16 years of experience

Laurence is Deputy Head of Emerging Markets Equity in London and lead portfolio manager for the Emerging Markets Value Equity Strategy. Prior to joining RBC Global Asset Management in 2013, Laurence was the Head of Aviva Investors' Emerging Markets team, where she was responsible for managing Global Emerging Markets income funds, and for developing quantitative stock selection and analysis models. Laurence began her investment career as a Quantitative Analyst at Société Générale Asset Management, supporting European and Global Equity portfolio management by developing quantitative models to assist in the portfolio construction and security selection process. In 1997, Laurence obtained a Magistère d'Économiste Statisticien & D.E.S.S. Statistique et Économétrie from Toulouse University in France. Laurence is a CFA charterholder.



Guido Giammattei

Head of Research, Portfolio Manager, Emerging Markets Equity

19 years of experience

Guido is a Portfolio Manager and Head of Research for the Emerging Markets Equity Team in London. Prior to joining RBC Global Asset Management in 2010, Guido was a Emerging Markets Portfolio Manager at Rexiter Capital Management. Previously, he worked as an Emerging Markets Equities Analyst at the same firm. Guido began his career in the investment industry in 1998 as an Equity and Derivatives Trader at BSI in Italy. He then joined HSBC Asset Management as a Securities Analyst, and progressed on to become a Junior Portfolio Manager. In 1998, Guido obtained a BSc from Università Cattolica Del Sacro Cuore and in 2005 he obtained an MBA from Carroll Graduate School of Management, Boston College.

Investment Team

RBC GAM-UK



Veronique Erb

Portfolio Manager, Emerging Markets Equity

17 years of experience

Veronique is a Portfolio Manager in the Emerging Markets Equity team in London. Veronique began her investment career in 2000 and joined RBC Global Asset Management (RBC GAM) in 2015. Prior to joining RBC GAM, Veronique was at CLSA Asia Pacific Markets where she was responsible for Asian ex-Japan equities covering geopolitical, macro economic and fundamental analysis of the region for 15 years. Veronique grew up in Hong Kong, and obtained a BSc from the University of Surrey in 1998 in Economics and German, and an MSc in Finance from Cass Business School, London.



Zeena Dahdaleh, CFA

Portfolio Manager, Emerging Markets Equity

10 years of experience

Zeena is a Portfolio Manager in the Emerging Markets Equity Team in London. Zeena began her investment career in 2007 and joined RBC Global Asset Management (RBC GAM) in 2009. Zeena has been with the Emerging Markets Team since inception. Prior to joining RBC GAM, Zeena worked as an investment banking analyst for Lehman Brothers, which subsequently became Nomura. During her time as an analyst Zeena's coverage included a number of emerging markets regions. In 2007, Zeena obtained a BSc (Econ) from the London School of Economics. Zeena is a CFA charterholder.



Richard Farrell, CFA

Portfolio Manager, Emerging Markets Equity

10 years of experience

Richard is a Portfolio Manager in the Emerging Markets Equity Team in London. Richard joined RBC Global Asset Management as an Equity Analyst in 2013. Prior to joining the firm, Richard worked at Aviva Investors providing fundamental equity analysis in the energy and materials sectors within Global Emerging Markets. Richard began his career in the investment industry in 2006 as an Analyst in HSBC's Corporate Finance Department. In 2005, Richard obtained a BSc in Business and Finance from Kings College in London. In 2009 he obtained an MSc in Investment Management from Cass Business School in London. Richard is a CFA charterholder.

Investment Team

RBC GAM-UK



Mustafa Boulhabel

Associate Portfolio Manager, Emerging Markets Equity

10 years of experience

Mustafa is an Associate Portfolio Manager in the Emerging Markets Equity Team in London. Mustafa first joined RBC Global Asset Management as an Investment Analyst in 2013, and recently rejoined the firm after taking time off for family reasons. Mustafa began his career in the investment industry in 2007 at Sinopia Asset Management as a Quantitative Analyst developing stock selection and allocation tools on equity markets as well as corporate bonds. In 2011, Mustafa moved to Aviva Global Investors, U.K., where he developed stock selection strategies for Emerging Market portfolios and created quantitative models as an Investment Analyst. In 2004, Mustafa obtained a DEUG, in 2005 he obtained his BA (Econ) and in 2007 he obtained his MiQE/F from University of Paris X.



Christoffer Enemaerke, CFA

Associate Portfolio Manager, Emerging Markets Equity

7 years of experience

Christoffer is an Associate Portfolio Manager in the Emerging Markets Equity Team in London. Christoffer joined RBC Global Asset Management (RBC GAM) in 2013 and began his career in the investment industry in 2012. Prior to joining RBC GAM, Christoffer was a research associate at Nordea Investment Management in Copenhagen. He was responsible for the bottom-up fundamental analysis of companies in the Asia ex-Japan region, in particular within the consumer sector. In 2010, Christoffer obtained a BSc in Business Administration and Economics and in 2012 he obtained an MSc in Finance and Accounting from Copenhagen Business School. Christoffer is a CFA charterholder.

Client Service

RBC GAM-US



Ashley B. Hyotte

Vice President, Institutional Portfolio Manager

Ashley Hyotte communicates with U.S., international and emerging markets equity strategy clients on an ongoing basis and ensures the professionals working on an account understand and pursue the client's objectives. Ashley joined RBC GAM-US in 2013. She was previously the Vice President of Business Development at Esplanade Capital, a long/short equity hedge fund in Boston, where she was responsible for identifying new prospects and servicing existing clients. Prior to Esplanade Capital, Ashley worked as an associate in the Global Client Group at BlackRock where she was responsible for the client service and business development of large institutional clients and prospects. She began her career in the investment industry in 2006 and earned a BA in Economics from Harvard University. Ashley holds FINRA Series 7 and 63 licenses and has passed Level II of the CFA Program.



Thomas Heflin

Managing Director, Institutional Sales

Tom Heflin is responsible for distributing the firm's investment solutions to institutional clients in the western US. He joined RBC GAM-US in 2012 from Russell Investments, where he spent 14 years selling both traditional and alternative strategies to institutional clients. Most recently, Tom was a regional director and distributed investment solutions to large pension plans in the Southeast and Midwest. As a director in alternative investments, he was responsible for marketing private equity, hedge fund and real estate strategies. Tom previously worked in Russell's performance and analytics group, selling performance measurement and portfolio analysis tools to investment managers and consultants. He has worked in the investment industry since 1998. He earned a BA from the University of Washington, holds FINRA Series 7 and 66 licenses and is registered as an Associated Person with the National Futures Association.

GIPS® Compliant Presentation Appendix

Emerging Markets Equity as of March 31, 2017

Inception Date: April 1, 2010

Benchmark: MSCI Emerging Markets Total Return Net Index

Currency: USD

Annual Returns

Year End	Composite Gross Return (%)	Composite Net Return (%)	Benchmark Return (%)	Composite 3-Yr St Dev (%)	Benchmark 3-Yr St Dev (%)	Number of Portfolios	Internal Dispersion (%)	Composite Assets (millions)	Firm Assets (millions)
2010/04 - 2010/12	16.23	15.40	16.08	n/a	n/a	1	-	796.7	252,397.6
2011	-15.42	-16.22	-18.42	n/a	n/a	1	-	873.8	244,857.4
2012	22.79	21.63	18.22	n/a	n/a	2	0.74	1,505.9	279,416.3
2013	0.82	-0.13	-2.60	16.58	19.04	3	0.36	1,483.4	296,003.0
2014	7.30	6.28	-2.19	13.31	15.00	4	1.96	1,667.4	302,064.4
2015	-8.14	-9.01	-14.92	12.11	14.06	5	0.82	1,913.7	276,979.3
2016	6.33	5.33	11.19	13.35	16.07	5	0.30	2,702.9	289,538.6
YTD 2017	11.34	11.07	11.44	12.98	15.88	5	0.31	3,156.5	294,456.0

Annualized Returns (%)

Composite and/or Benchmark	QTD	YTD	1 Year	3 Year	5 Year	7 Year	Since Inception
Composite - Gross of Fees	11.34	11.34	14.86	5.09	5.07	5.14	5.14
Composite - Net of Fees	11.07	11.07	13.78	4.10	4.07	4.14	4.14
Benchmark	11.44	11.44	17.21	1.18	0.81	1.69	1.69

The GIPS® Compliant Presentation is incomplete without the full disclosures, continued on the next page

n/a = not applicable

St Dev = Standard Deviation

(GIPS® Compliant Presentation continued on the next page)



GIPS® Compliant Presentation Appendix

Emerging Markets Equity as of March 31, 2017

Description of the Firm: For the purposes of Global Investment Performance Standards (GIPS®), RBC Global Asset Management is the asset management division of Royal Bank of Canada (RBC), operating under the following brands: RBC Global Asset Management (RBC GAM) in Canada, the U.S. (institutional), the U.K. and Hong Kong; Phillips, Hager & North Investment Management (institutional); and BlueBay Asset Management (institutional). With offices around the world, RBC GAM offers a full range of global investment solutions in cash management and fixed income, equity, balanced, alternative and specialty investment strategies through mutual funds, hedge funds, pooled funds and separately managed accounts. The RBC GAM group of companies has more than C\$389 billion (US\$290 billion) in assets under management as at December 31, 2016. RBC purchased Phillips, Hager & North Investment Management, including the assets of BonaVista Asset Management, on May 1, 2008, and BlueBay Asset Management on December 17, 2010. A complete list and description of the firm's composites and performance results is available upon request.

Compliance Statement: RBC GAM claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. RBC GAM has been independently verified for the periods January 1, 2002 through December 31, 2015. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS® standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS® standards. The Emerging Markets Equity (USD) composite has been examined for the periods April 1, 2010 - December 31, 2015. The verification report(s) is/are available upon request.

Composite Description: The Emerging Market Equity (USD) Composite includes all portfolios that invest in Emerging Market equities managed by RBC GAM directly. Reported in \$USD.

Benchmark: The benchmark is the MSCI Emerging Market net index. The Index is designed to measure the equity market performance of emerging markets. Index returns are provided for comparison purposes to represent the investment environment existing during the time periods shown. An index is fully invested, includes the reinvestment of dividends and capital gains, but does not include any transaction costs, management fees, or other costs. Holdings of each separately managed account in a composite will differ from the index. An investor may not invest directly in an index.

Gross of Fees: Gross of fees performance is presented gross of all fees, but after all trading expenses. Returns are presented net of withholding taxes on dividends, interest income and capital gains where applicable.

Net of Fees: Net of fee performance is calculated using the maximum stated annual fee of 0.95% calculated and applied monthly.

Performance Calculations: Results are based on all fully discretionary accounts meeting the composite definition, including those accounts no longer with the firm. Returns are shown in U.S. Dollars, and include the reinvestment of all income. Performance shown for the Emerging Markets Equity Composite is based on information generated by RBC Global Asset Management's internal performance systems, which may differ from the performance shown in official books and records of certain investment funds which form a part of the composite. Official books and records for certain investment funds which form a part of the composite include the impact of a fair value for market timing that is applied to certain securities as of the close of trading for the fund. For the purposes of calculating the Emerging Markets Equity Composite, we prepare a separate performance stream for such funds that eliminates the impact of this fair value adjustment. This second performance stream is used to calculate performance of the composite in an effort to better align the methodology for calculating composite performance with the methodology applied to calculate the benchmark. Additional information regarding policies for valuing portfolios, calculating performance, and preparing presentations is available upon request. Past performance is not indicative of future results.

Composite Dispersion: The composite dispersion of annual returns is indicated by the performance of individual accounts representing the equal weighted standard deviation of returns. Dispersion of returns is calculated for portfolios included in the composite for the full year.

3-Year Standard Deviation: Periods with less than 3 years of data will show "n/a".

Derivatives, Leverage and Short Positions: The portfolios may use derivatives for hedging purposes, and may also use derivatives such as options, futures, forwards and swaps for non-hedging purposes as a substitute for direct investment, as long as the portfolio's use of derivatives is consistent with its investment objectives. Currency hedging is used primarily as a risk management tool to limit the volatility of portfolio returns and may be used tactically to enhance returns. Currency hedge ratios can range between 0-100%, depending on asset class and mandate. No leverage has been used in any of the portfolios contained in the composite.

Fee Schedule: The management fee schedule is as follows: For U.S. clients: 0.95% for the first US\$50mm, 0.85% on the next US \$50mm, and 0.80% for all assets over US\$100m. Advisory fees are described on this page and on Form ADV Part 2A. RBC GAM reserves the right to negotiate all advisory fees.

Minimum Account Size: Currently there is no minimum account size in order to be included in this composite. Prior to January 01, 2012 an account must be at least \$25,000,000 to be included.

Creation Date: This composite was created on July 30, 2013 and has an inception date of April 1, 2010.

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Additional Disclosures

Emerging Markets Equity

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Definitions – CFROI[®] is an approximation of the economic return, or an estimate of the average real internal rate of return, earned by a firm on the portfolio of projects that constitute its operating assets.

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DISCUSSION SHEET

ITEM #C7

Topic: Emerging Markets debt manager search

Attendees: Keith Stronkowsky, NEPC – Senior Consultant
David Muller, Ashmore – Portfolio Manager
John Ricketts, Ashmore - Distribution

Discussion: Staff recommends engaging the Ashmore EM Blended Debt Fund LP as an emerging markets debt manager to redeploy excess cash and to build out the Emerging Markets Debt sub-asset class allocation of the Fixed Income portfolio. A portion of the investment will be funded from liquidating the Ashmore Emerging Markets Local Currency Bond Fund which was previously approved by the Board. NEPC concurs with this recommendation. Staff and NEPC will discuss their recommendation and Ashmore will present their emerging markets blended debt strategy to the Board.

Ashmore is an institutional investment manager which focuses exclusively on emerging markets. Firm wide it manages \$55.9 billion assets with approximately \$45.8 billion invested in various emerging markets debt strategies as of March 31, 2017.

Staff Recommendation: Staff recommends approving funding the Ashmore EM Blended Debt Fund LP with an initial investment of up to \$50 million with authority to increase the investment as permitted by the Investment Policy Statement.

INVESTMENT RECOMMENDATION

Date: July 13, 2017
To: DFPF Board
From: DFPF Investments Staff
Subject: Ashmore Emerging Markets Blended Debt

Recommendation

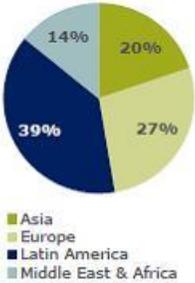
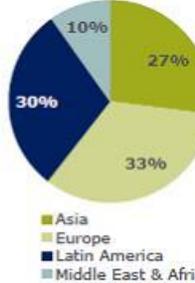
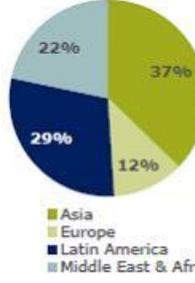
Staff recommends approving an initial investment of up to \$50 million to the Ashmore Emerging Markets Blended Debt (“AEMBD”) strategy within DFPF’s Emerging Markets Debt asset allocation of the Fixed Income asset category, with authority to increase the investment as permitted by the Investment Policy Statement. A portion of the initial investment of \$50 million will come from liquidating the Ashmore Emerging Markets Local Currency Bond Fund (“AEMLCB”) which is approximately \$19 million, with the rest coming from excess cash on hand. The Board approved terminating the local currency product in December 2016 but held off liquidating the portfolio as our cash needs subsided.

Executive Summary

DFPF’s current Asset Allocation calls for a target of 6% to Emerging Markets Debt with a range of 0%-9%. The actual allocation to Emerging Markets Debt is 0.9% as of May 31, 2017, with the AEMLCB being the only manager in that category. As a reference, the Ashmore Emerging Markets Debt Fund which was part of the Emerging Markets Debt asset class was liquidated to raise cash and improve liquidity of the plan. At the May 11, 2017 Board meeting, staff discussed initiating new investment manager searches to redeploy excess cash on hand, including the search of emerging markets debt manager(s) to add to the category which is currently under allocated.

Emerging markets debt investments are debt instruments issued by global emerging markets governments, quasi-governmental entities, or corporations in local currencies or hard currencies such as the Dollar and the Euro. The investment universe can be broadly categorized as external sovereign debt (hard currencies), local sovereign debt (local currencies), and corporate debt (hard currencies). The following chart shows the three main emerging market debt indices and their characteristics as of December 31, 2016. The actual investment universe is larger than the indices and is approximately \$4 trillion.

EMD Investment Universes – Major Benchmarks Characteristics

	EM External Sovereign (Hard Currency)	EM Local Sovereign (Local Currency)	EM Corporates (Hard Currency)
What is it?	A bond issued in US Dollars by a government	A bond issued in the currency of the country by the government	A bond issued in US Dollars by an EM company
Index	JPM EMBI	JPM GBI-EM-GD	JPM CEMBI BD
Market value	\$783 Billion	\$705 Billion	\$407 Billion
Exposure By Region	 <ul style="list-style-type: none"> ■ Asia ■ Europe ■ Latin America ■ Middle East & Africa 	 <ul style="list-style-type: none"> ■ Asia ■ Europe ■ Latin America ■ Middle East & Africa 	 <ul style="list-style-type: none"> ■ Asia ■ Europe ■ Latin America ■ Middle East & Africa
Number of countries/companies	65 countries	15 countries	554 companies/51 Countries
Number of issues	559	201	1200
Duration	6.50	4.91	4.55
Yield to Maturity	5.80%	6.79%	5.44%
Credit rating (Moody's/S&P/Fitch)	Ba1/BB+/BB+	Baa2/BBB/BBB	Baa3/BBB-/BBB

Source: JP Morgan



While the opportunity set includes the above three segments of the universe, AEMLCB only invests in local currency sovereign debt instruments thus limiting the portfolio from sourcing returns from the other parts of the investment universe. Staff and NEPC believe a blended emerging markets debt strategy that allows the manager to source returns from the full spectrum of the investment universe and tactically allocate capital based on market conditions offers the most efficient method to gain exposure to emerging markets debt. As such, Staff and NEPC recommend liquidating the AEMLCB and fund the AEMBD strategy with a \$50 million initial investment.

Process

Staff and NEPC reviewed an emerging markets debt manager search book together and evaluated six focused placement list (“FPL”) managers in depth, comparing their strategies, fees, track record, performance, risk allocations among other characteristics. The FPL is produced by NEPC through screening a universe of over 70 managers offering emerging markets blended debt strategies, as well as through NEPC’s quantitative and qualitative review process. In addition to the FPL managers, Staff reviewed materials or held meetings with several managers who are not on the FPL but offer similar strategies to gain market intelligence and compare them with the FPL managers.



Staff further reviewed materials provided by each of the six FPL managers and had follow up discussions with NEPC research analysts and/or the manager. Staff also spoke with three references who are institutional investors, have gone through emerging markets debt manager searches, and are currently invested with Ashmore. No issues were discovered during these reference calls.

Portfolio

The AEMBD Composite was consummated in June 2003. Since inception the strategy has grown to approximately \$10.3 billion with multiple vehicles including pooled and segregated accounts offering daily or monthly liquidity. Staff recommends investing in a commingled vehicle that offers monthly liquidity but lower operating expenses and better performance as compared to a US mutual fund or an offshore mutual fund that provides daily liquidity to harness the additional returns and save on costs.

Ashmore's investment process is largely top down that involves weekly investment committee meetings reviewing global and local economies, policies, interest rate and currency dynamics. The macro overview is then supplemented by country analysis in terms of credit risk, currency strength, and local currency yield curve. Inputs from macro analysis are taken in order to allocate capital and determine the portfolio's exposure to different themes including external debt, local currency, corporate debt, etc.

Ashmore's corporate credit research process is bottom up where the research team considers many factors and employ proprietary financial models for both qualitative and quantitative analysis. Close attention is paid to legal risks within any investment and to the political risk of the country itself as well.

Ashmore's investment team members visit countries and companies they invest in regularly as part of the due diligence and monitoring process. It has established relationships and engages in consistent dialogues with key decision makers in relevant ministries and the central banks, allowing the team better understanding of the local emerging market conditions regarding monetary policy, politics, and business cycles.

The portfolio does not employ leverage to enhance return. In the event Ashmore has a view on certain currencies and chooses to hedge its currency exposure, cash is posted as a percentage of the FX forward contract. As of March 31, 2017, the portfolio's investments are approximately equally split between investment grade and high yield bonds. It has a weighted average coupon yield of 6.43%, duration of 5.05 years, and an average credit quality of BB.

Performance

Ashmore is one of the few institutional quality managers which focus exclusively on emerging markets. Its Emerging Markets Blended Debt strategy has demonstrated superior performance against its custom benchmark (50% EMBI/25% GBI-EM-GD/25% ELMI+), its peers, as well as

DPFP’s index for this sub asset class (50% EMBI and 50% GBI-EM-GD) The chart below shows its trailing period returns against DPFP’s benchmark as of 1Q2017:

	Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Yr
Ashmore	4.7%	4.7%	13.6%	4.6%	3.8%	5.5%	6.4%
50% EMBI /50% GBI-EM-GD	5.2%	5.2%	7.3%	1.8%	2.1%	4.0%	5.6%

The strategy also outperforms its peers and the benchmark from a risk adjusted return standpoint with a 0.94 Sharpe Ratio since inception (as of 12/31/2016).

Pricing

Staff recommends an initial allocation of up to \$50 million to a commingled structure that is offered to pension funds and other intuitional investors and has monthly liquidity. Pricing for this vehicle is 75 bps flat fee on the first \$50 million and 70 bps on the next \$50 million of investments. Operating expenses in 2016 were 17 bps and are expected to go down due to anticipated additional inflows into the vehicle. Comparing to other separate account or mutual fund structures, this vehicle offers lower management fees, lower operating expenses and higher historical returns.

Summary

Staff and NEPC recommend approving an initial allocation of up to \$50 million to the Ashmore Emerging Markets Blended Debt strategy. With this commitment, DPFP’s allocation to Emerging Markets Debt increases to approximately 2% comparing to a 6% target. Ashmore has a large, experienced team in the emerging markets debt space, well established relationships with key decision makers, and a consistent investment process. All of these have translated into their superior performance against its peers and the benchmark. Lastly, Ashmore Emerging Market Blended Debt conforms with the Investment Policy Statement requirements for a new manager.

IPS checklist

1. Lead portfolio manager tenure/experience at least 5 years - Ashmore utilizes a team approach with 31 professionals contributing to the investment committee. Senior investment committee members all have at least 5 years tenure with Ashmore.
2. Firm level assets under management: 75 million or more under management - Ashmore AUM is \$55.9 billion
3. Investment style should consistently match what is approved and outlined in the Investment Manager’s guidelines, and will be compared and analyzed against peers/sub-asset class Category - AEMBD is an emerging markets debt manager with top quartile performances in 3 and 5 year periods



4. Sharpe ratio generally would exceed .3, which may not be possible following a prolonged bear market in that respective market, and must exceed 50% of its peer group over a three-year rolling period - AEMBD 3- year Sharpe Ratio is 0.66 and is ranked top 10%
5. Three year rolling total return, on a net of fee basis, must exceed 50% of its peer group - AEMBD 3-year return is 5.61% and ranks in top 2%
6. On site due diligence meeting is recommended - Staff has not conducted on site due diligence as Ashmore is headquartered in London, UK. However, as part NEPC's due diligence and monitoring process, NEPC research analysts have done onsite and off-site meetings with Ashmore
7. Fiduciary acceptance and acknowledgement: yes.



D A L L A S
POLICE & FIRE
PENSION SYSTEM



Emerging Markets Blended Debt Recommendation

July 13, 2017

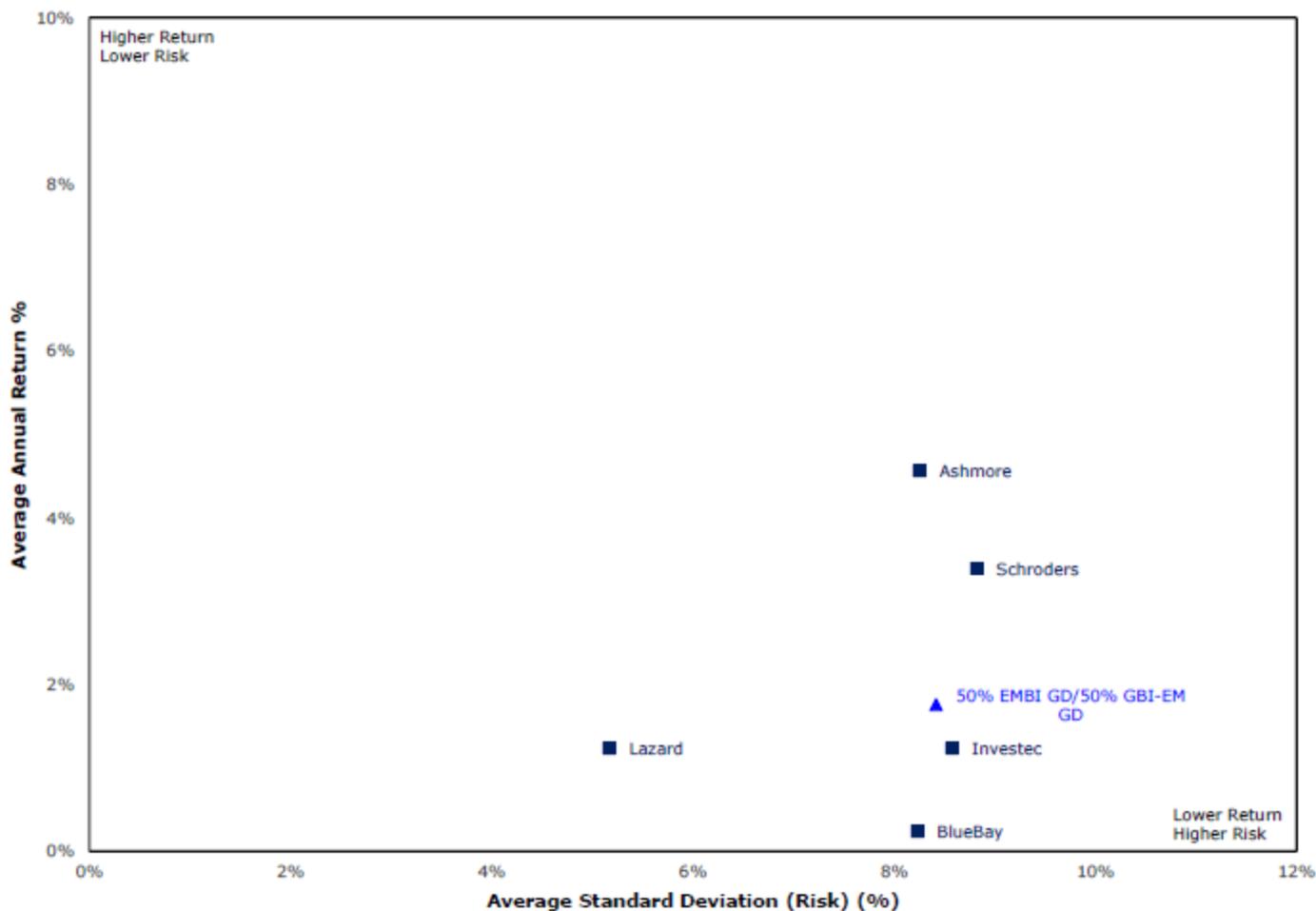
Overview

- Goals:
 - Redeploy cash
 - Rebalance towards target allocation
- Current EMD allocation is less than 1% vs. target of 6%
- Structure study proposed retaining the two Ashmore EM debt products and exploring opportunities in 2017
- Ashmore Emerging Markets Debt Fund was liquidated in December 2016 to raise cash
- Ashmore Emerging Markets Local Currency Bond Fund is the only remaining manager in the asset class - lacking allocations to EMD external sovereign debt and corporate debt

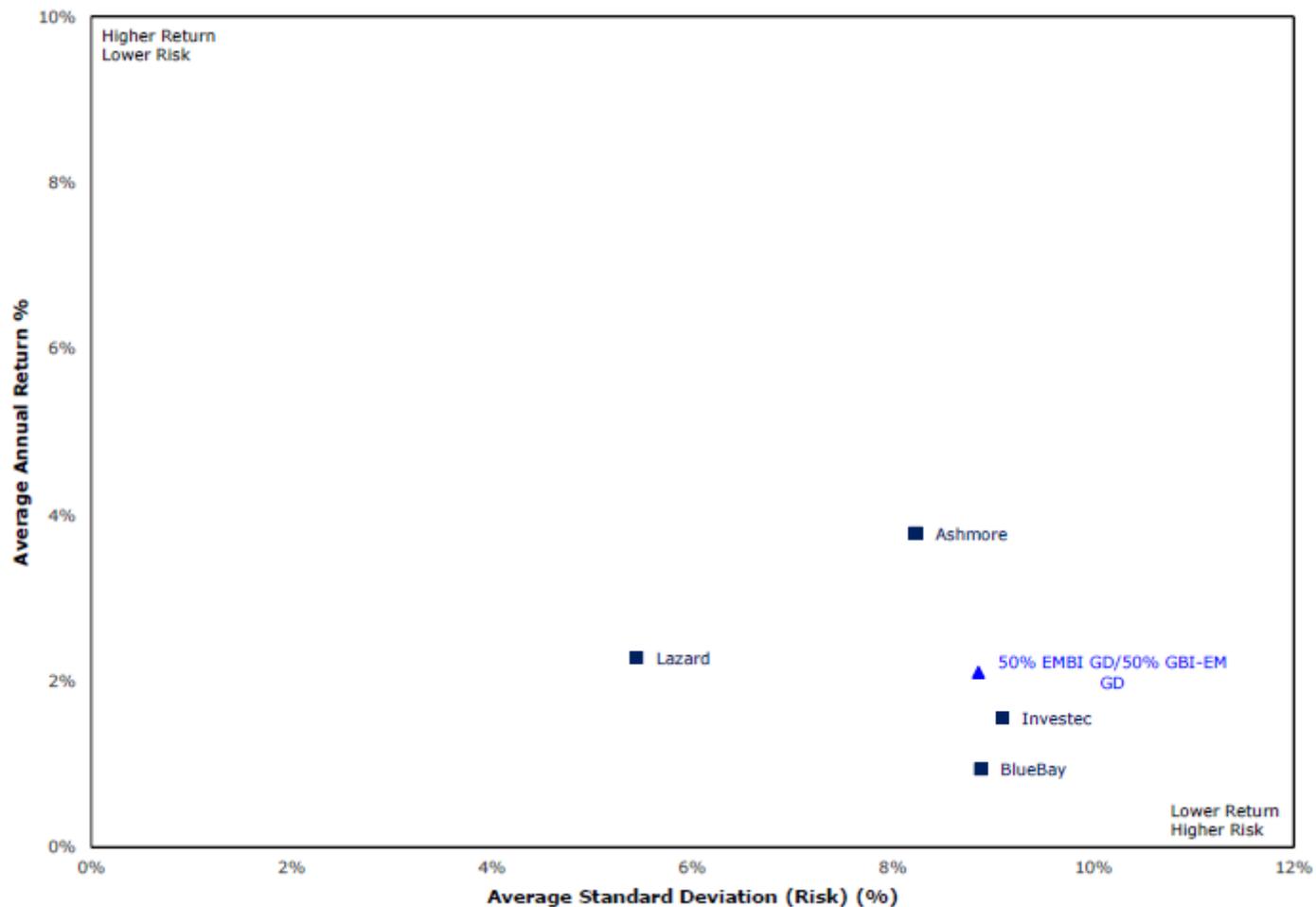
Process

- Consideration of NEPC FPL and non-FPL managers
- Reviewed EMD Manager Search Book with NEPC
- Evaluated manager provided materials
- Follow up communications with managers and consultations with NEPC
- Internal analysis and further due diligence
- Spoke with references

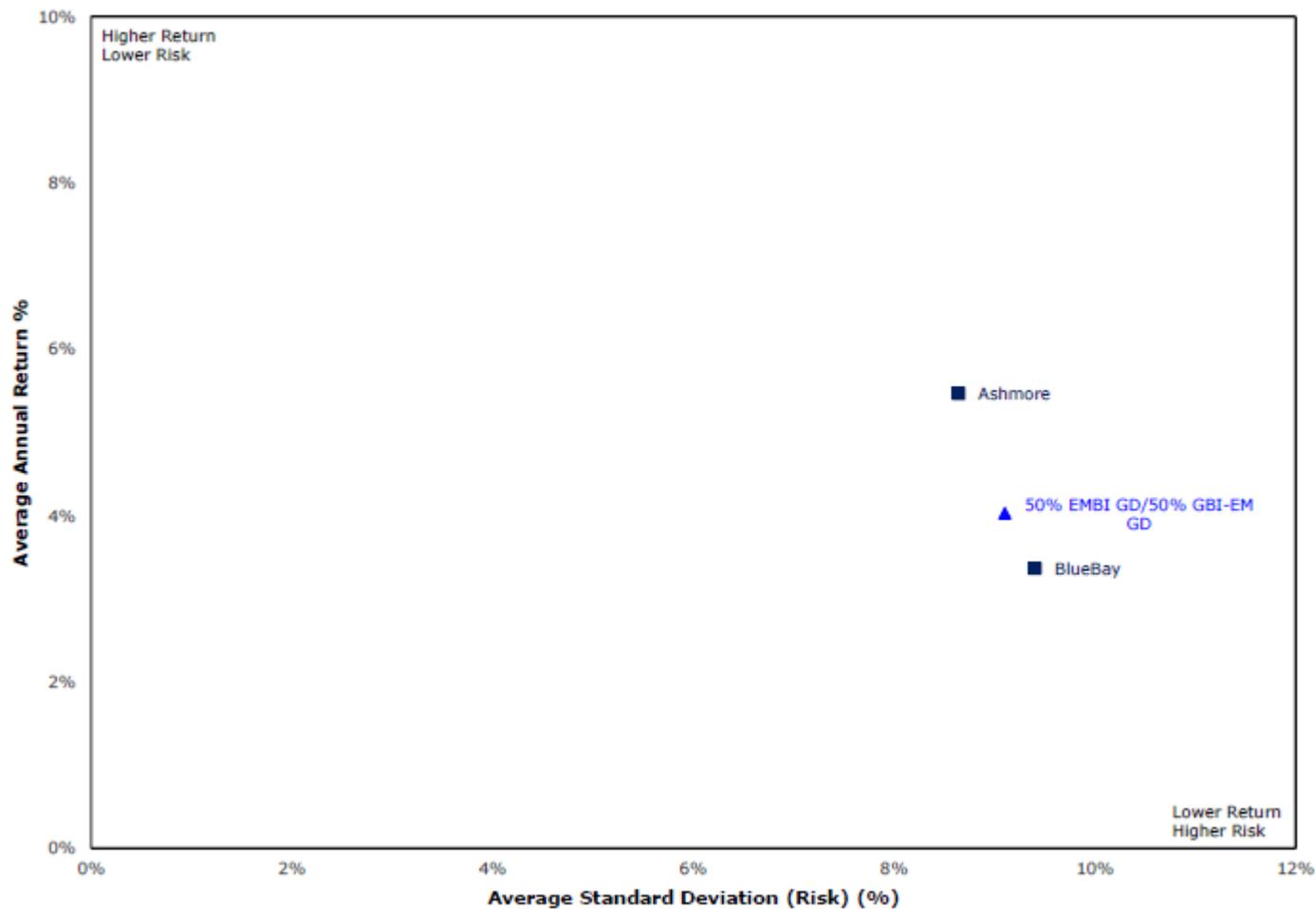
3 Year Total Risk/Returns Comparison - (Net of Fees)



5 Year Total Risk/Returns Comparison - (Net of Fees)



7 Year Total Risk/Returns Comparison - (Net of Fees)



Pricing and Liquidity

- Investment Management Fees:
 - First \$50 million – 75bps
 - Next \$50 million – 70bps
- Operational expenses:
 - 17bps in 2016 and expected to go down due to inflows
- Monthly liquidity with 5 business days notice prior to month end

Recommendation

Hire Ashmore EM Blended Debt Fund LP for the following considerations:

- Emerging markets specialist
- Blended debt strategy allows for sourcing returns from the entire EMD investment universe and tactical asset allocations
- Deep and experienced team
- Strong and long track records
- Consistent top-quartile risk adjusted return over time

Ashmore Emerging markets Blended Debt

As of 7/13/2017



PROPOSED NEW INVESTMENT	
1) Name of investment and manager	Ashmore EM Blended Debt
2a) DFPF Asset Class	Fixed Income
2b) Asset class allocation target	33%
3a) DFPF Sub-Asset Class	Emerging Markets Debt
3b) Sub-Asset class allocation target	6%
4) Proposed investment size	\$50m initial
5) Projected funding date and schedule	7/30/2017
INVESTMENT STRATEGY/STRUCTURE	
1) Investment strategy	To achieve total return through a combination of income and capital appreciation by investing in a portfolio of emerging markets external debt, local currency and rates, and corporate debt
2) Total fund or strategy size	\$10.3 billion
3) Firm assets under management	\$55.9 billion
4) Investment Legal Structure	Commingled Fund
5) Liquidity	Monthly
6) Manager Benchmark	50% EMBI, 25% GBI-EM-GB, 25% ELMI+
7) Asset Class Benchmark	50% EMBI, 50% GBI-EM-GB
8) Peer Group	Emerging Markets Blended Debt
8) Management / Performance fees	75 bps on first \$50 million, 70 bps on the next \$50 million
DUE DILIGENCE INFO	
1) Staff meetings with manager	Yes
2) Consultant Recommendation	Attached
3) Staff Recommendation	Attached
4) Conforms with IPS Criteria (Note any exceptions)	Yes
5) IAC Approval Date	Pending
6) Board Approval Date	Pending
7) Actual Investment Funding Date	Pending



NEPC, LLC

To: Trustees & Staff
Dallas Police & Fire Pension System (DPFP)

From: Rhett Humphreys, CFA, Partner
Keith Stronkowsky, CFA, Sr. Consultant
Hayley Tran, Sr. Research Analyst

Date: July 13, 2017

Subject: Emerging Markets Debt Manager Recommendation

EMD BACKGROUND:

In March 2016, DPFP approved a new long-term strategic Asset Allocation plan which calls for a 6% target allocation (~\$125 million, as of 5/31/17) to Emerging Market Debt (EMD) within the liquid portion of the Fixed Income portfolio. As a reminder, emerging markets are developing countries that are typically experiencing rapid growth. The more notable ones are the BRICS (Brazil, Russia, India, China, South Africa), but EMD also includes investments in other emerging countries in Eastern Europe, Latin America, as well as in other parts of Asia. EMD currently offers attractive yields relative to developed markets, the potential for incremental returns in the fixed income space, and a diversification benefit given lower correlations to other asset classes.

Currently, DPFP has approximately \$19 million invested in EMD via the Ashmore Local Currency Bond Fund. This fund emphasizes investments in sovereign bonds issued by emerging market governments in their own currency. While this is a suitable approach to gain local currency exposure, it lacks allocations to the other two EMD areas: EMD External Bond Market (sovereign bonds issued by emerging market governments, typically in USD or Euros) and EMD Corporate Bonds. NEPC believes that a Blended EMD approach in which the manager invests across all three EMD sectors is most efficient, and we recommend this approach for DPFP.

MANAGER SEARCH PROCESS & FINDINGS:

Over the past several months, NEPC and Staff have conducted research and due diligence on potential managers in the EMD space, including:

- A review of NEPC's EMD Blended Focused Placement List (FPL) of preferred strategies—this is a group of strategies that NEPC expects will provide positive, net-of-fee, alpha over the long term.
- Additional due diligence meetings with potential candidates and analysis of DPFP's existing investment with Ashmore.

Based on the research, NEPC's view is that Ashmore's top down, macro-economic focus provides a solid foundation for incorporating a tactical, blended approach to EMD. Ashmore's team of professionals also have close ties to policy makers and government officials. This access provides an information advantage relative to their peers.



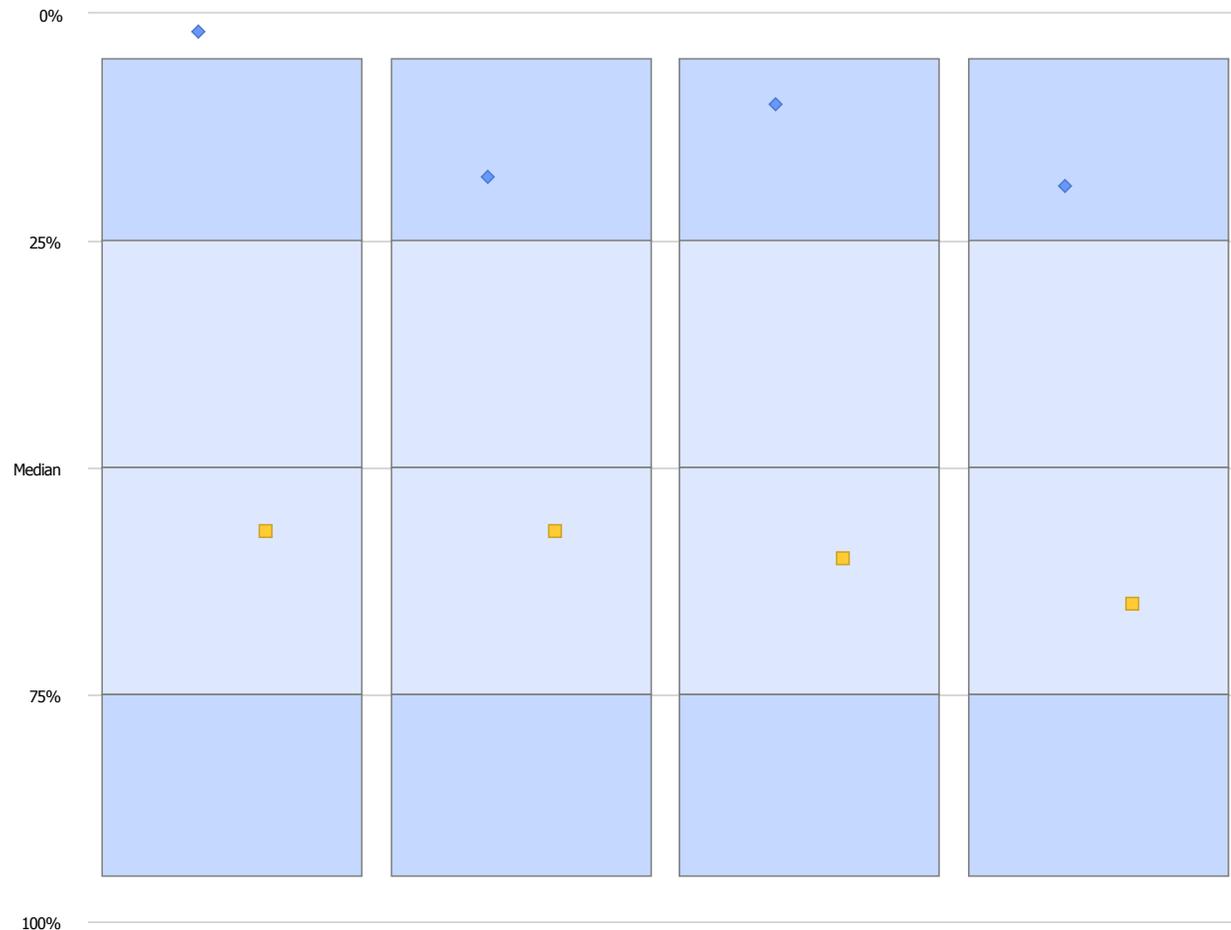
With regards to DFPF's Investment Policy Statement, Ashmore also meets the following criteria:

- *Sharpe ratio generally would exceed 0.3, which may not be possible following a prolonged bear market in that respective market, and must exceed 50% of its peer group over a three year rolling period. (As of 3/31/17).*
- *Three year rolling total return, on a net of fee basis, must exceed 50% of its peer group. (As of 3/31/2017).*

RECOMMENDATION:

After completing a review of NEPC's Emerging Market Debt Blended FPL and conducting additional due diligence of the potential candidates, NEPC concurs with Staff's view that Ashmore would be an ideal candidate to initiate an EMD Blended investment. Accordingly, NEPC recommends that the Board retain Ashmore with an initial \$50 million investment.

- ◆ Ashmore Group plc: Ashmore EM Blended Debt Strategy
- Balanced Index: 50% JPM GBI-EM Global Div/50% JPM EMBI Global Div



Universe: eVestment Emerging Mkts Fixed Income - Blended Currency

	VT	RM	Returns 3 Years		Returns 5 Years		Sharpe Ratio 3 Years ¹		Sharpe Ratio 5 Years ¹	
				Rk		Rk		Rk		Rk
5th percentile			5.14		5.35		0.73		0.73	
25th percentile			4.47		4.59		0.57		0.55	
Median			2.89		2.61		0.34		0.34	
75th percentile			1.02		1.24		0.09		0.12	
95th percentile			-0.53		0.54		-0.11		0.05	
# of Observations			27		21		27		21	
◆ Ashmore Group plc	SA	GF	5.61	2	4.82	18	0.66	10	0.57	19
■ Balanced Index	IX	IX	1.76	57	2.11	57	0.19	60	0.23	65

Results displayed in USD.

¹Citigroup 3-Month T-Bill



Ashmore Emerging Markets Blended Debt Prepared For Dallas Police and Fire Pension System

July 13th, 2017

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1. Group Overview
2. The opportunity in Emerging Markets 'Blended' Debt
3. Ashmore's approach to managing 'Blended' Debt
4. Performance summary & portfolio characteristics

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Group overview



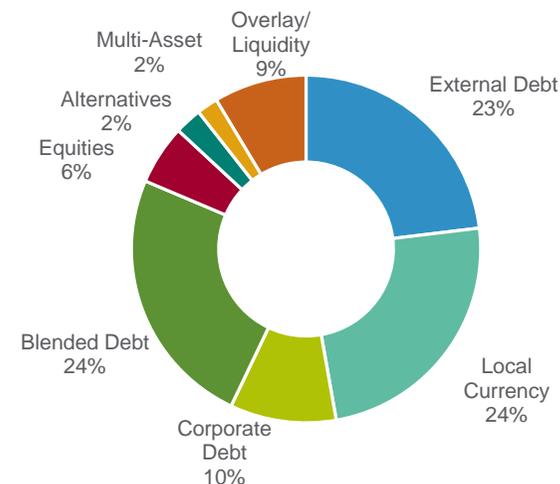
Section 1

Ashmore: A leading Emerging Markets asset manager

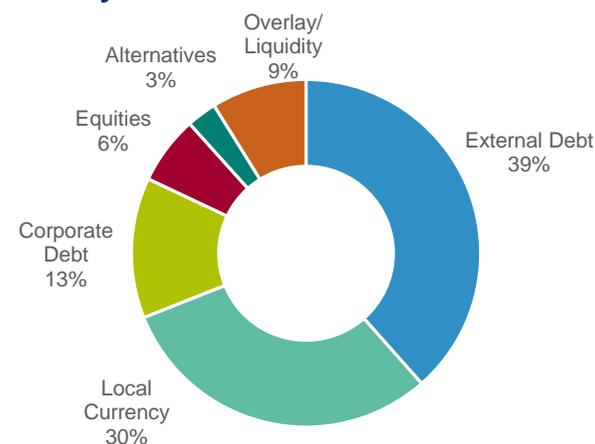
Emerging Markets specialist with long-term track record and USD 55.9bn¹ of AuM

- Ashmore’s roots can be traced back to 1992, originally as a division of the Australia and New Zealand Banking Group (“ANZ”) managed by a team of investment professionals who have been working in Emerging Markets since the mid 1980s
 - MBO in 1999
 - Ashmore Group listed on the London Stock Exchange in October 2006, strong employee equity ownership culture
 - FTSE-250 company
- Headquartered in London with 248 employees globally¹
 - 78 investment professionals globally¹ and an average of 25 years’ industry experience for the members of the Investment Committee
 - Offices in China, Colombia, India, Indonesia, Japan, Peru, Saudi Arabia, Singapore, UAE, UK and USA
- AuM of USD 55.9bn¹ across eight investment themes

AuM theme split – by primary theme



AuM by theme as invested²



Source: Ashmore.

(1) Data as at 31-Mar-17.

(2) Some funds are permitted to invest into other themes and AuM shown is as invested (aggregate of investments made across all funds).

Investment themes & funds

Ashmore manages capital across eight different investment themes with dedicated strategies under each theme providing either global Emerging Markets exposure or specific regional or country exposure.

	External Debt (USD 21.5bn)	Local Currency (USD 17.0bn)	Corporate Debt (USD 7.3bn)	Equities (USD 3.6bn)	Alternatives (USD 1.6bn)	Overlay/ Liquidity (USD 4.9bn)
Global Emerging Markets Sub-themes	<ul style="list-style-type: none"> Broad Sovereign Sovereign, investment grade Short duration 	<ul style="list-style-type: none"> Bonds Bonds (Broad) FX FX+ Investment grade 	<ul style="list-style-type: none"> Broad High yield Investment grade Local currency Private Debt Short duration 	<ul style="list-style-type: none"> Global EM Value Global Small Cap Global Frontier Global Equity Opportunities Active Equity 	<ul style="list-style-type: none"> Private Equity <ul style="list-style-type: none"> Healthcare Infrastructure Special Situations Distressed Debt Real Estate 	<ul style="list-style-type: none"> Overlay Hedging Cash Management
	Blended Debt (USD 13.6bn)					
	<ul style="list-style-type: none"> Investment grade 	<ul style="list-style-type: none"> Blended debt 	<ul style="list-style-type: none"> Absolute return 			
Regional / Country focused Sub-themes		<ul style="list-style-type: none"> China Indonesia 	<ul style="list-style-type: none"> Latin America Asia 	<ul style="list-style-type: none"> Africa China India Indonesia Latin America Middle East Saudi 	<ul style="list-style-type: none"> Andean Asia India 	
Multi-Asset (USD 1.1bn)						
<ul style="list-style-type: none"> Global 						

NB. All data as at 31-Mar-17.

Some funds are permitted to invest into other themes and AuM shown is as invested (aggregate of investments made across all funds). Blended Debt and Multi-Asset AuM figures are therefore also included within the respective individual themes within which they invest. Double count is removed for purposes of Group reporting.

The Ashmore Advantage

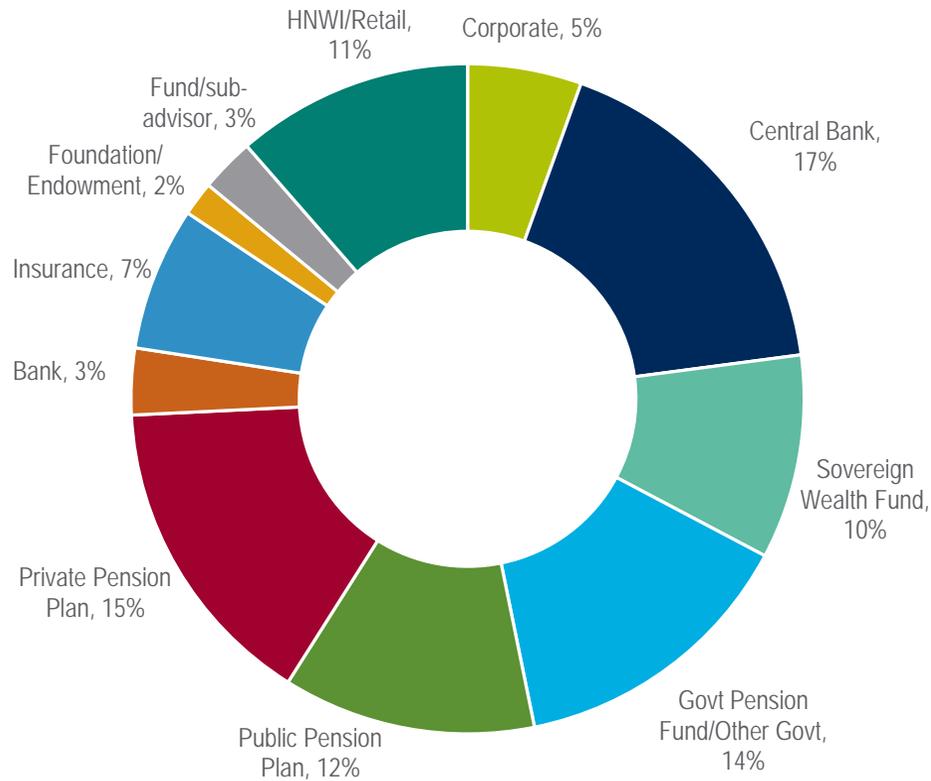
Dedicated to Emerging Markets	<ul style="list-style-type: none"> • An Investment Manager focused exclusively on Emerging Markets ('EM') • Founder & Co-Chair of EMTA (Emerging Markets Trade Association) • Longstanding presence and dedication to Emerging Markets since 1980's • The Ashmore Foundation contributes sustainably to disadvantaged communities in the Emerging Markets where we invest
Depth, breadth & experience	<ul style="list-style-type: none"> • 78 investment professionals within Ashmore globally¹ • Breadth of investment themes enables countries/companies to be helped throughout their economic and business life cycles • Experienced emerging market professionals whose backgrounds provide for wide coverage and contact networks across more than 60 Emerging Market countries
Relationships	<ul style="list-style-type: none"> • Investees – in and relating to emerging economies with governments, corporates, entrepreneurs, investee companies, etc • Investors – approx. 89% institutional clients, diversified across geographical regions including Emerging Markets • Contacts – governments, corporates and those generated by our regional subsidiaries/offices • Education – Investor events for exchange of ideas and to enhance understanding of Emerging Markets investing
Scale of firm	<ul style="list-style-type: none"> • Ashmore manages assets for institutions such as governments, public pensions, private pensions, insurance companies, banks, corporations and other long-term strategic allocators of capital • Capital is allocated to Ashmore products across the liquidity band from daily-dealing funds to multi-year, locked-up partnerships
Investment philosophy & process	<ul style="list-style-type: none"> • Specialist, long-term approach starting with macro, top-down active management • Unchanged since 1992 • Proven across wide range of market conditions • Local market engagement as a fundamental element of Ashmore's approach to ESG considerations
Performance	<ul style="list-style-type: none"> • Since the launch of our first EMD fund, EMLIP, in 1992, Ashmore has established a track record of alpha generation and strong outperformance across themes & cycles² • Active, forward-looking management of portfolios over market cycles has been a core part of Ashmore's Investment process since inception
Combination of global & local asset management resources	<ul style="list-style-type: none"> • Strong focus on behaviour of market participants, liquidity conditions, and key local relationships – regional office presence along with frequent in-country visits • Established an extensive network of contacts, including policy-makers, local financial institutions and major international counterparties
Risk, Legal and Operational Management	<ul style="list-style-type: none"> • Strong focus on firm and mandate risk management, led by independent Risk Management & Control Team • Dedicated Legal & Transaction Management Team provides hands-on oversight of all legal issues

Source: Ashmore. 1) Data as at 31-Mar-17. 2) as a division of ANZ Banking Group prior to 1999 and Ashmore thereafter

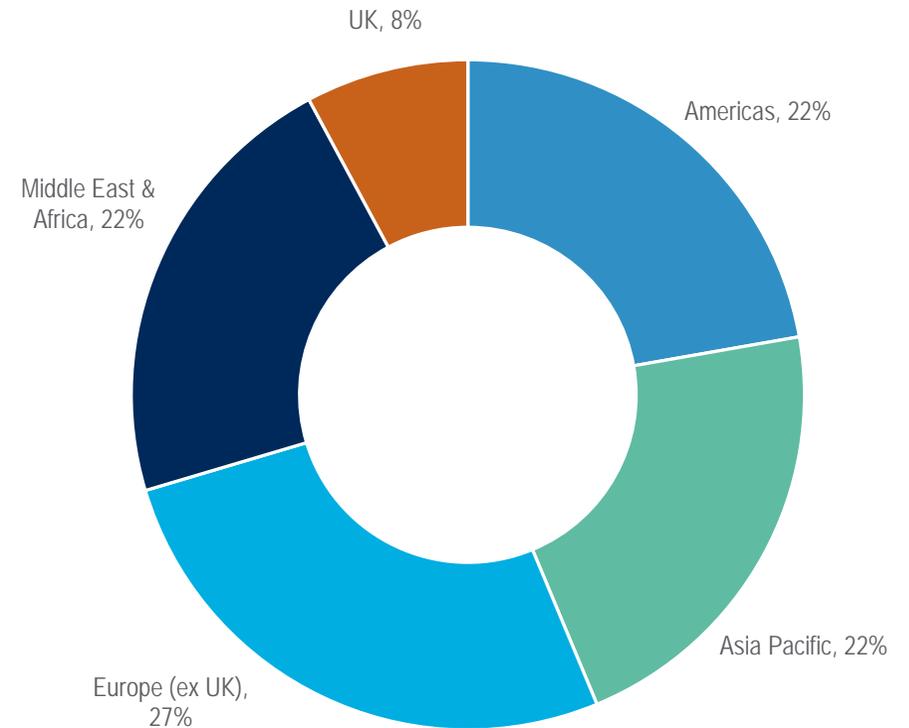
Diversified investor base

Institutional asset base represents 89% of AuM and is diversified across investor types and geographies

AuM breakdown by investor type



AuM breakdown by investor geographies



Source: Ashmore. Data as at 31-Mar-17. Excludes undefined assets and categories representing less than 0.5% of total AuM. Estimates only; unaudited figures.

Local market presence

Ashmore has a global footprint, with local presence in some of the largest Emerging Markets

- Local knowledge in a global firm brings a competitive advantage as the value added is critical to understanding local markets
- Local offices benefit from the support and resources of a global firm
- Integration of local offices through Ashmore's global infrastructure facilitates efficient communication and dissemination of information throughout the firm



● Global asset management platform ● Local asset management platform ▲ Distribution office (x) number of investment professionals

The opportunity in Emerging Markets 'Blended' Debt

Section 2

Emerging Markets Blended Debt: Key asset class characteristics

Size, growth & inflows	<ul style="list-style-type: none"> Historically superior risk-adjusted returns to individual EM debt sub-asset classes Largest opportunity set within EM debt at roughly USD 18.2 trillion¹ Ashmore's blended debt AuM was USD 13.6 billion as at 31-Mar-17
Liquidity	<ul style="list-style-type: none"> Liquidity is important even in this large market; Ashmore has particular focus and expertise in managing liquidity Asymmetric market – pure quant or passive approaches that do not consider market liquidity are riskier
Structural change	<ul style="list-style-type: none"> Change in investor base in Emerging Markets debt is structural (high local savings increasingly invested locally) Structurally lower developed world growth accelerates trend of diversification away from developed world
Political and economic development	<ul style="list-style-type: none"> Similar to the developed world, EM Central banks are largely independent and well managed Macro policy improvements in Emerging Markets over the last decade have led to lower inflation, more stability and better creditworthiness Deficits turn to surpluses through prudent policy mix
Spreads/returns	<ul style="list-style-type: none"> Returns from asset allocation across sub-asset classes and alpha generated by yields, FX and credit Superior growth rates compared to developed markets; carry and liquidity support higher prices JPM EMBI GD index spreads are attractive (currently c.310bps²) compared to other credit products US policy/base rates are likely to stay lower for longer
Risk	<ul style="list-style-type: none"> Strong Emerging Markets economic fundamentals underpinning robust corporate earnings and cash flows Expectations of greater alignment of risk premiums In periods of global equity and expected USD weakness, investors benefit from reduced exposure to G7 currencies, in favour of appreciating Emerging Market currencies, i.e. a portfolio hedge Risk of UST widening to more 'normal' levels, which could impact EM external debt prices in the short term
Diversification	<ul style="list-style-type: none"> Emerging Markets debt provides strong diversification away from traditional asset classes Returns are a function of multiple factors including top-down (primary), tactical and bottom-up Broad exposure across different instruments and asset types in addition to allocations to more than 60 countries Specialist themes include EM FX, hard currency bonds, local currency bonds, corporate credit, all in long or short duration and investment grade or high yield or a combination

(1) Based on Ashmore estimates. Source: Size and Structure of Global Emerging Markets Debt – August 2016 (2) As of 31-Mar-17.

Tactical asset allocation

Returns per calendar year

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 YTD
22.2%	23.0%	10.2%	15.2%	18.1%	-3.8%	34.9%	15.7%	7.4%	17.4%	-0.6%	7.4%	1.3%	10.2%	6.5%
16.9%	14.8%	6.3%	12.3%	16.0%	-5.2%	29.8%	13.1%	2.3%	16.8%	-2.0%	5.0%	1.2%	9.9%	5.2%
16.2%	11.6%	6.1%	9.9%	6.2%	-12.0%	22.0%	12.2%	-1.8%	15.0%	-5.3%	-5.7%	-7.6%	9.7%	3.9%
15.8%	10.3%	3.2%	6.5%	3.9%	-15.9%	11.7%	5.7%	-5.2%	7.5%	-9.0%	-7.0%	-14.9%	3.5%	3.0%

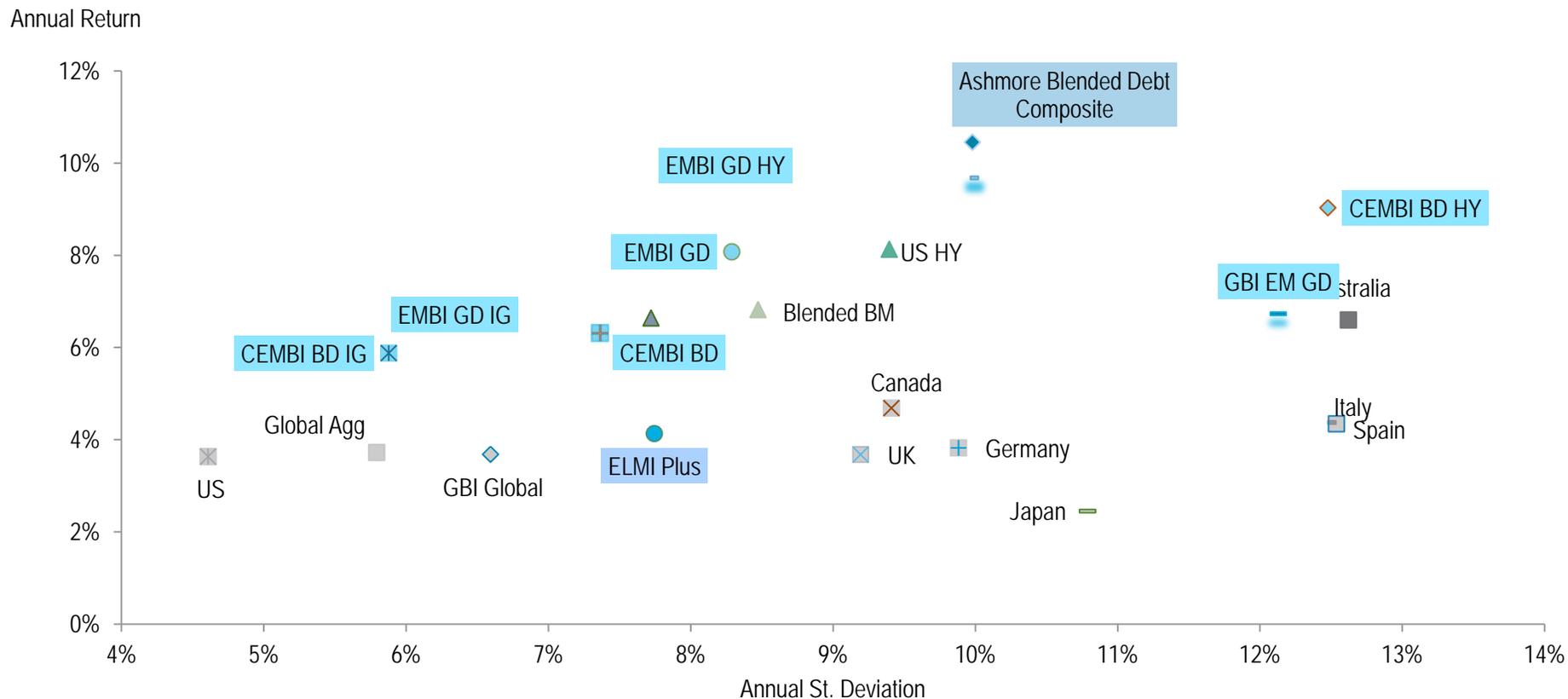
Key:

External Debt JPM EMBI GD	Local Currency Bonds JPM GBI-EM GD	EM Corporate Debt JPM CEMBI BD	FX JPM ELMI+
------------------------------	---------------------------------------	-----------------------------------	-----------------

Source: JP Morgan. Data as at 31-Mar-17.

Risk-adjusted return for global and EM bond indices

Risk Adjusted Return (Jun 2003* – Mar 2017)



*Since composite inception (30-Jun-03).

**50% JPM EMBI GD; 25% JPM GBI-EM GD; 25% JPM ELMI+.

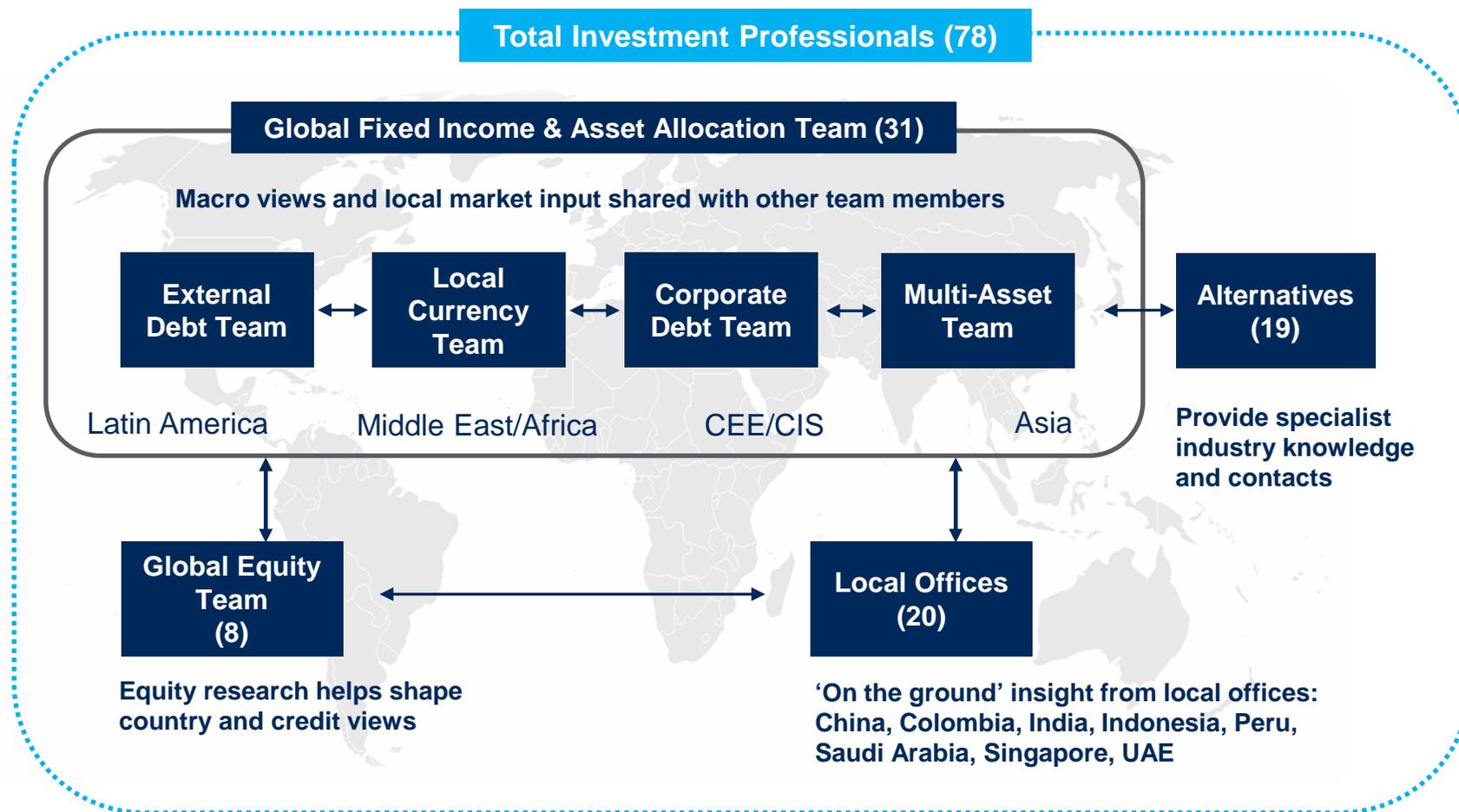
Source: JP Morgan, Bloomberg. Data estimated as at 31-Mar-17.

Ashmore's approach to managing 'Blended' Debt

Section 3

Global Research Capabilities

All Ashmore portfolios are managed collectively by the Investment Team. Portfolio Managers have dual portfolio management and research responsibilities and also specialise by investment theme and geography



Source Ashmore as at 31-Mar-17. (x) number of investment professionals.

Investment Philosophy: Specialist, value-driven, macro top-down active manager

Macro top down

- Forward looking analysis of global and local macro-economics, politics, interest rate and currency dynamics
- Analysis of the drivers of market prices
- Scenario planning

Credit focus

- Analysis of credit risk of the assets:
 - Ability to pay - financial analysis and policy analysis
 - Willingness to pay - local politics
- - ESG integration: use of Country Risk Scores to incorporate financial impact of ERG risks
- Scenario planning: weighing political and policy outcomes

Value driven

- Look for divergence between market prices and credit risk
- Tolerance for mark-to-market volatility
- In-house research, integrated in portfolio management team

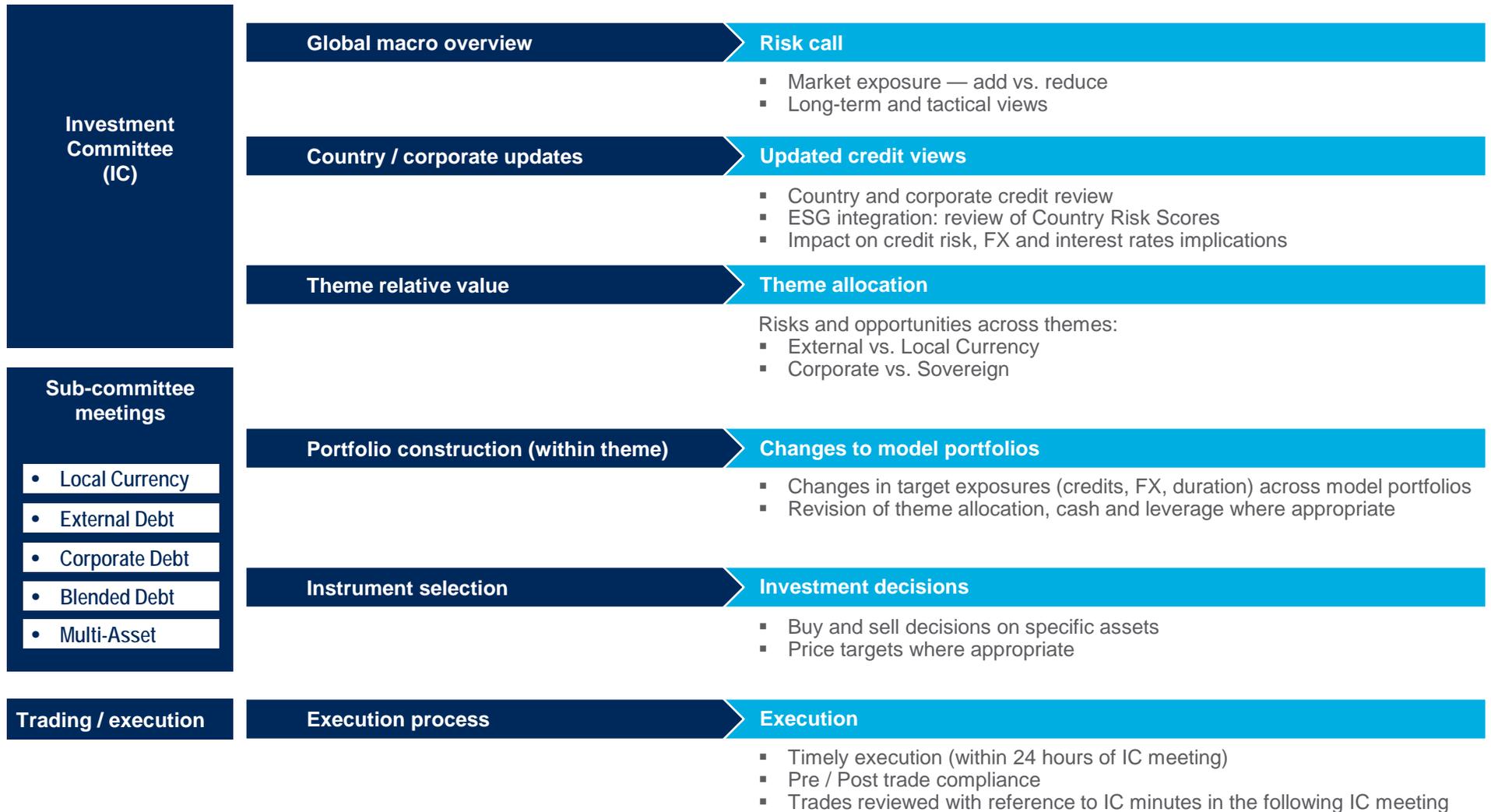
Active management

- Collective, team-based approach and institutionalised investment process, unchanged since 1992
- Focus on exploiting the structural changes in Emerging Market instruments
- Investment life cycle - analysis, execution, management and exit

Liquidity obsessed

- Robust risk management culture
- Liquidity integral to every investment decision
- Liquidity embedded in portfolio construction

Investment Committee Process



Investment committee process: macro overview

Review macro outlook with a view to managing market exposure across Emerging Markets assets, both long term and tactically

Inputs	Scenario planning	Outputs
<p>Review of:</p> <ul style="list-style-type: none"> • Macro data • Policy events • Political events • Market performance (across markets) • Market technicals (issuance, volatility, positioning) <p>Presentation of recent and expected developments by Ashmore strategists</p> <p>Discussion by Investment Committee</p>	<p>Medium term base case for:</p> <ul style="list-style-type: none"> • Global growth expectations • Business cycle • Global policy stance • Medium-term market implications <p>Tactical Weekly review of our base case and difference with market consensus and positioning</p>	<p>Ashmore's 'Risk Call'</p> <ul style="list-style-type: none"> • Outlook for duration, credit and FX risks • Cash / exposure levels in fixed income portfolios
<p>Key competitive advantages</p>	<ul style="list-style-type: none"> • Global business gathering global insights from contacts • Deal flow • Clients 	

Investment process: country analysis

Purpose: active assessment of country conditions to determine credit risk, prospective currency strength and local currency yield curve

INPUTS

OUTPUT

Fundamentals

Macro

- Growth, growth drivers
- Inflation, CPI components
- Human capital and socio-political achievements

Debt analysis

- Public sector debt
- Fiscal policy
- Debt sustainability analysis
- Funding sources and flexibility
- Domestic credit
- Environmental contingent liabilities

Balance of payments analysis

- Current account dynamics
- Capital account composition
- Reserves management

Politics/ Policy

Political analysis

- Election cycle, timeline to polls
- Base case and risk cases
- Institutional strength and corruption

Policy Implications

- Policy mix: trade-off between growth and inflation
- Monetary policy & FX regime
- Structural reforms agenda

Valuation & Technicals

Valuation

- Credit spread vs. comps and other credit markets
- FX levels (vs. PPP / REER, etc.)
- Policy rate & yield curve shape
- Nominal vs. Real rates

Technicals

- Government bond issuance calendar / profile
- Liquidity conditions
- Cross border flows

Updated Country View

- Updated Country Risk Scores (ESG integration)
- Updated credit view
- Updated FX view
- Updated yield curve view

Key competitive advantages

- Depth of resources
- Network of contacts within EM
- Interests aligned with those of EM issuers
- Extensive travel

Investment Committee process: corporate credit analysis

Purpose: assessing the outlook for individual Corporate Credits

INPUTS

OUTPUT

Fundamentals

Macro Impact

- GDP Growth, Fiscal spending
- Inflation, Currency Strength
- Consumer Spending/Financing

Capital Adequacy

- Sources of Funding / Available lines
- Leverage / Debt maturity profile
- FX exposure in debt/revenues

Earnings / Cash Flow:

- Earnings Trend / Potential
- Cash Flow / Interest Coverage
- Discretionary / Maintenance Capex

Due Diligence:

- Meeting with Management
- Background Checks
- Company Visit

Documentation Overview

Deal Structure

- Public / Private Deal
- Senior / Sub, Secured or not
- Distribution Strategy / Lead(s)

Assessment of Collateral

- Quality / Value of Collateral
- Liquidity / Price Volatility
- LTV ratio for the loan/bond
- Margining Mechanism

Quality of Documentation

- Legal review of documentation
- Have final copies of all docs?
- Can we improve the structure or quality of documentation

Relative Value

- Sector Outlook
- Credit spread vs. comparables
 - Country / Region
 - EM vs. Non-EM
- Historical trend in valuation

Technicals

- Loans maturing ahead of bond
- Discount/premium to the Curve
- Expected Liquidity
- Type of Investors
- Seasoned / New Issue

Credit View

- Updated outlook for the credit path for next 12 months

Valuation

- We assign a fair value spread
- Compare our estimate for spread with current market spreads
- Assess size of opportunity after cost of trading

Recommendation

- Buy / Sell / Hold decision
- How (if at all) we adjust the model portfolio

Key competitive advantages

- Size of Team, Depth of resources
- Network of contacts within EM

- Extensive track record in this space
- Long term partnership with many EM issuers

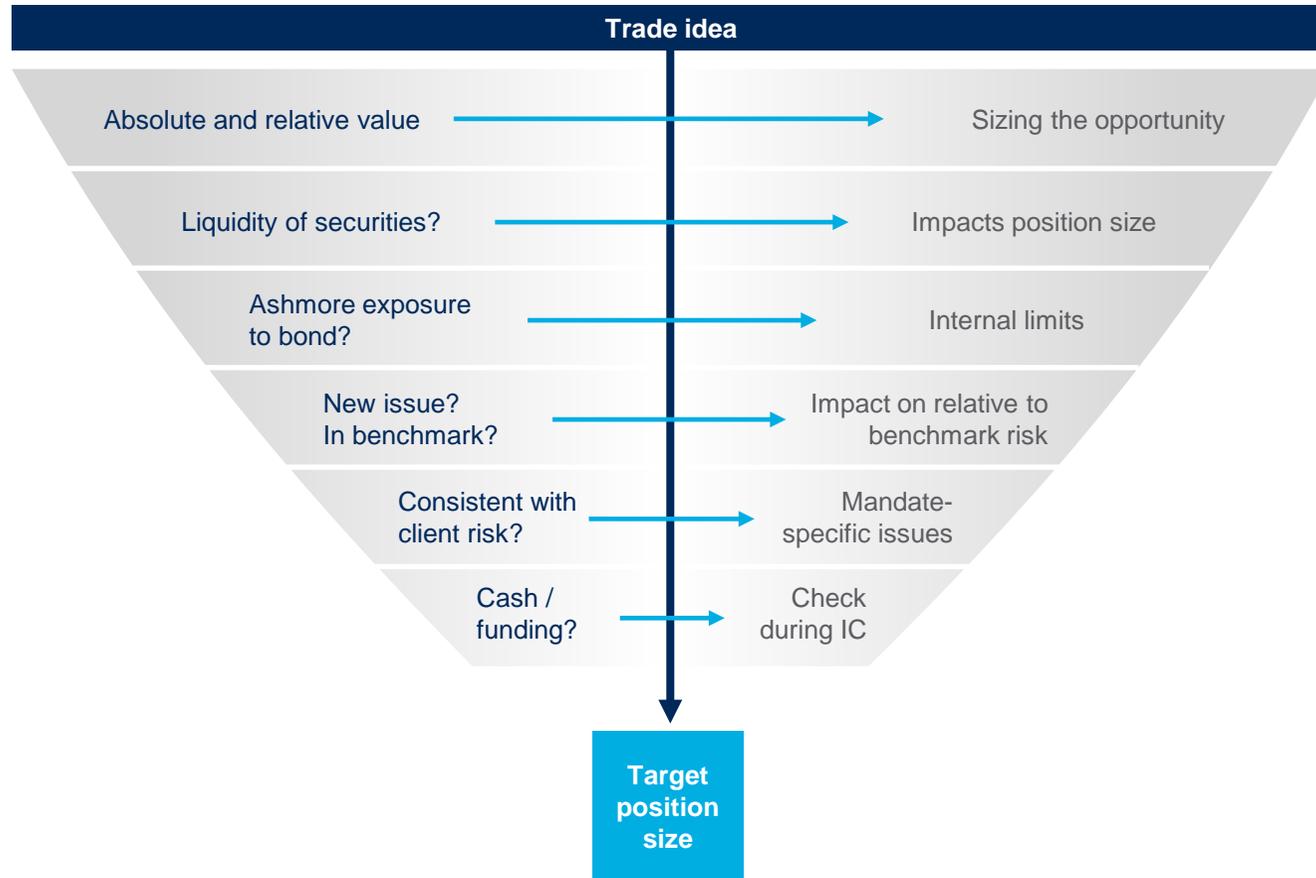
Investment Committee process: Theme Allocation

The Theme Allocation decision depends on the expected behaviour (scenario planning) of each asset class in our base case global macro scenario

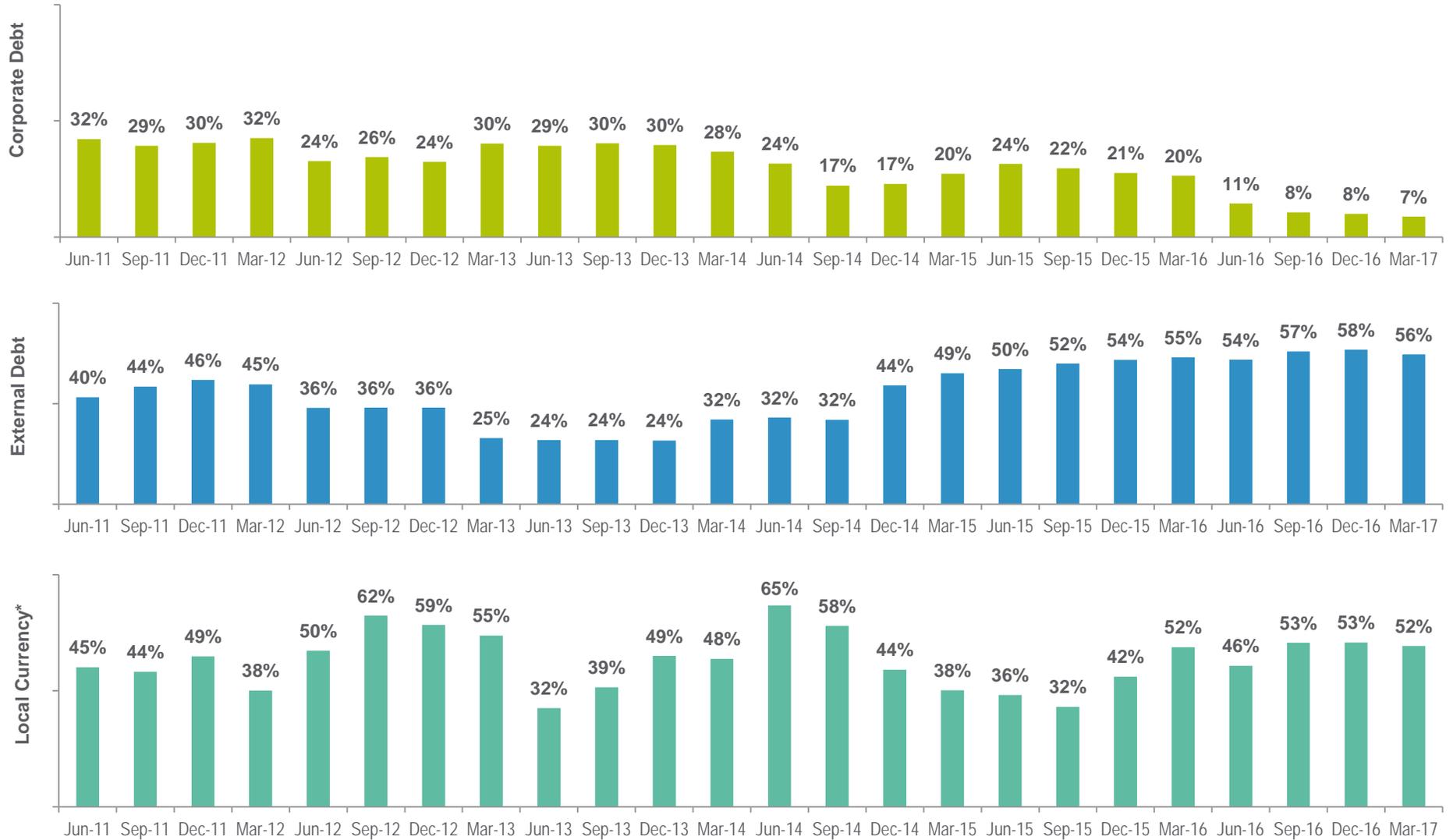
The decision is subject to Relative Value and Alpha Opportunities filters

1. Macro Top Down	2. Theme Relative value	3. Scenario Planning	Outputs
<p>Our Global Macro views (see 'Risk Call') determine our appetite for the following economic risks:</p> <ul style="list-style-type: none"> • G7 duration sensitivity • Credit risk sensitivity • FX risk sensitivity • Liquidity 	<p>Our specialist teams (external debt, local debt, corporate debt) present the opportunities they see in their respective areas</p> <ul style="list-style-type: none"> • Valuations relative to credit fundamentals • FX trends and valuations • Liquidity <ul style="list-style-type: none"> - Supply/demand - Bid-offer spreads <p>The three themes are compared for relative <u>value</u> and <u>alpha</u> opportunities</p>	<p>We analyse how the respective themes are likely to respond in our base case macro outlook</p> <p><u>Subject to good valuation and the availability of alpha opportunities</u>, we increase the allocation to the theme that has the best upside/downside in our base case macro scenario</p>	<p>Theme Allocation</p> <ul style="list-style-type: none"> • Percentage exposure to our model portfolios for External Debt, Local Currency (FX/Bonds) and Corporate Debt • Credit risk sensitivity • FX risk sensitivity • Duration and curve sensitivity <p>Cross check at Blended Fund level for</p> <ul style="list-style-type: none"> • Concentration risk • Cash & Liquidity • Covariance between asset classes

Position sizing considerations



Investment Theme evolution Ashmore EM Total Return SICAV



Source: Ashmore. *net of hedges.

Performance summary & portfolio characteristics

Section 4

Performance summary: Ashmore EM Blended Debt Composite

Overview

Objective: To achieve total return through a combination of income and capital appreciation by investing in a portfolio of both external debt and local currency debt

Mandate: Emerging Market Blended Debt

Benchmark: 50% JP Morgan EMBI GD, 25% JP Morgan ELMI+ and 25% JP Morgan GBI-EM GD

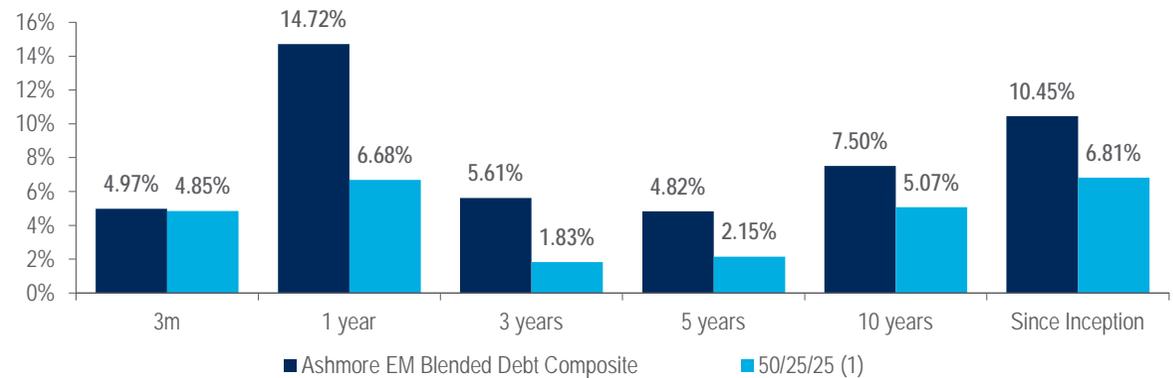
Inception date: June 2003

Size: USD 10.3bn

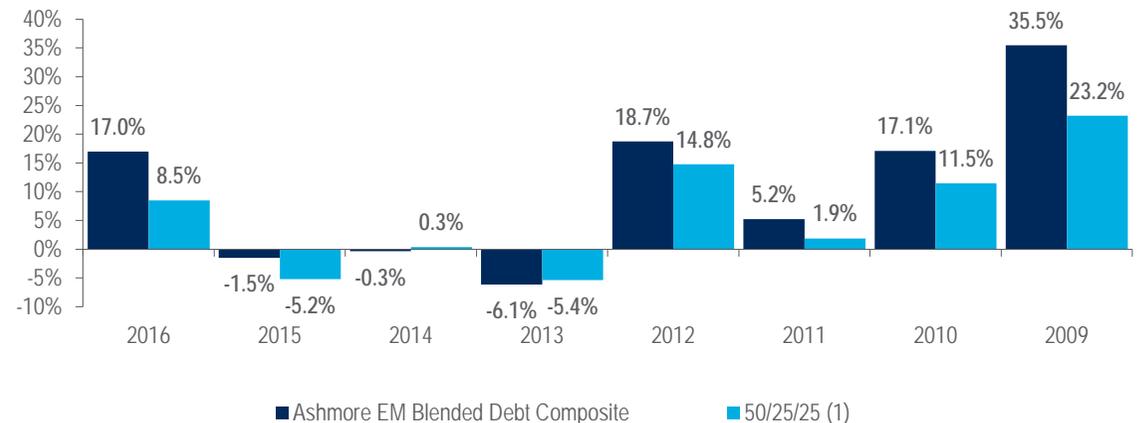
The historical gross annualised and calendar year returns presented are
1) supplemental information for the purpose of GIPS and must be used in conjunction with the compliant presentation in the appendices,
2) preliminary and subject to changes prior to compliant presentation over the same period being made available.

Sources: Ashmore, Bloomberg. Data as at 31-Mar-17. Periods greater than one year are annualised. See appendices for composite tables and "gross of fee" disclosure.
(1) Benchmark is 50% JP Morgan EMBI GD, 25% JP Morgan ELMI+ and 25% JP Morgan GBI-EM GD.

Historical annualised returns

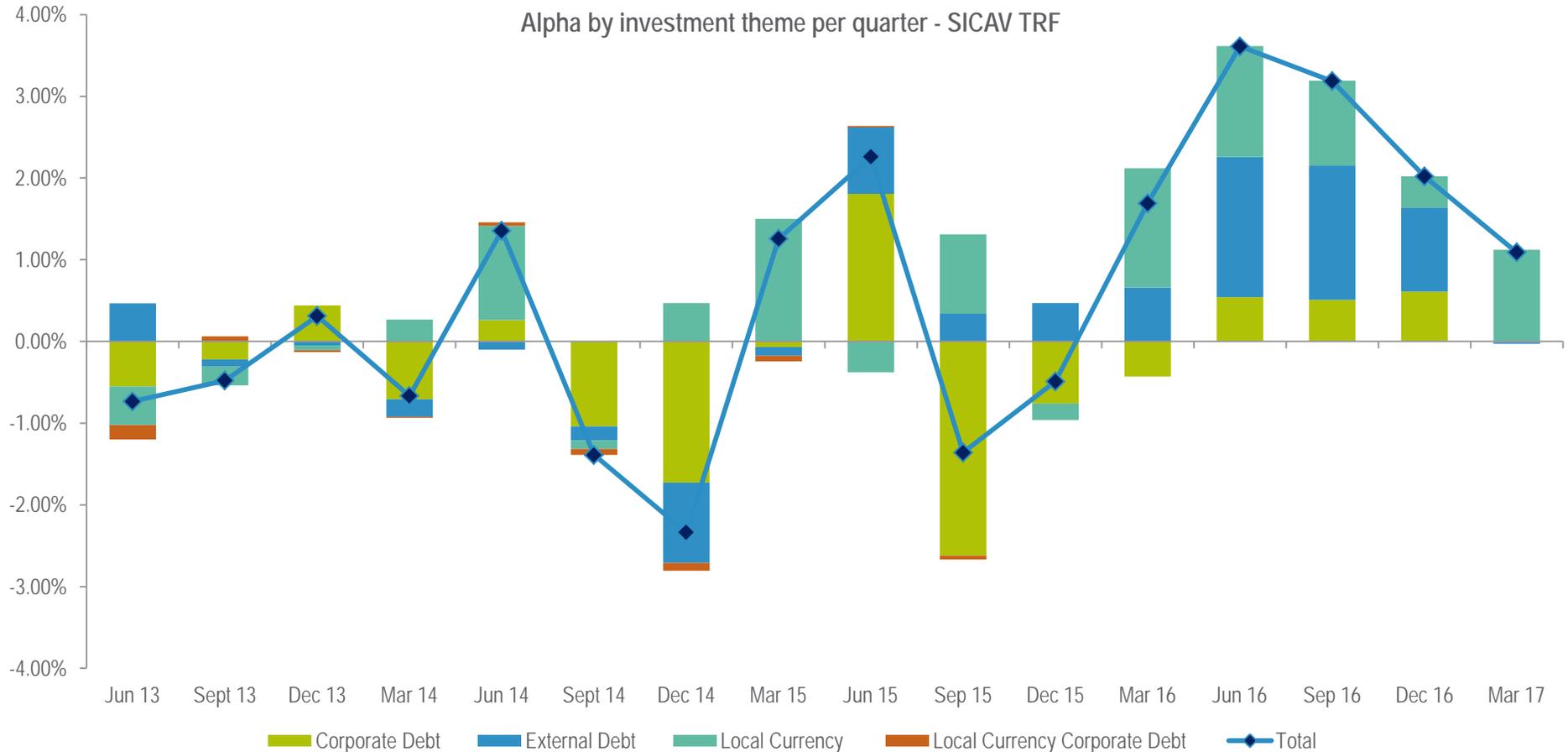


Historical calendar year returns



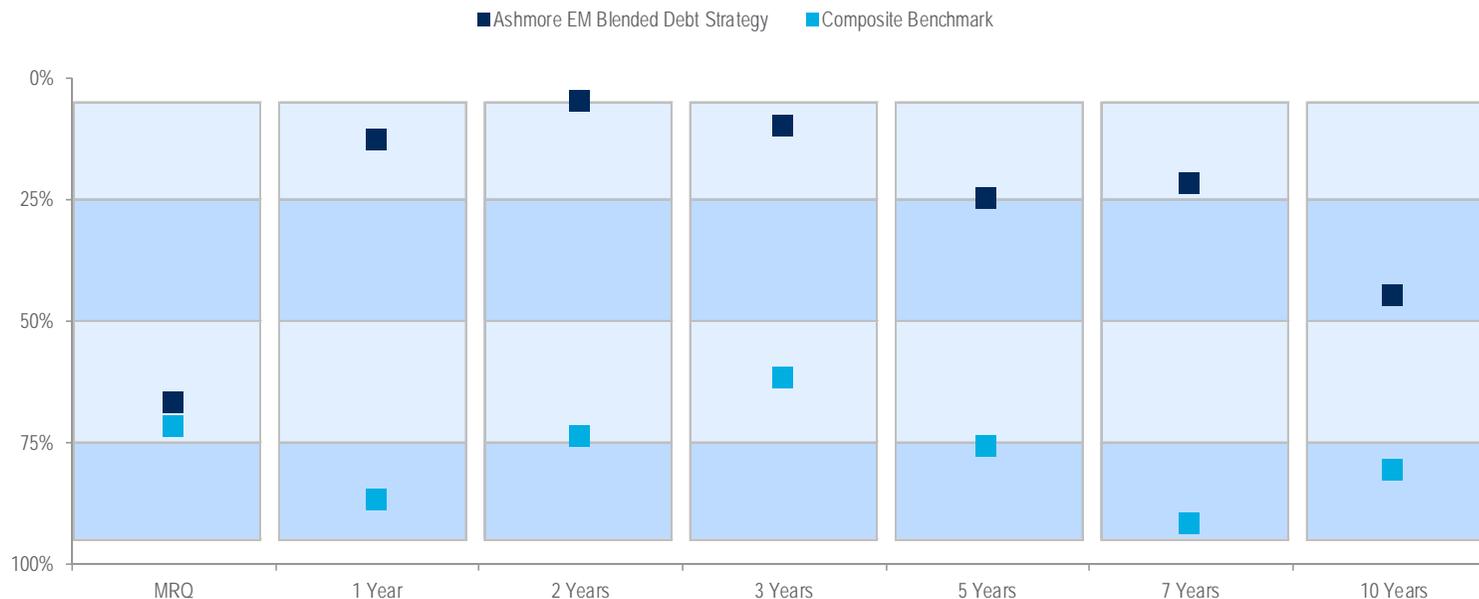
Representative Blended strategy: Performance analysis

Sources of returns have varied over time across our main investment 'themes' (External Debt, Local Currency Bonds and FX, Corporate Debt).



Source: Ashmore. Data estimated as at 31-Mar-17. 'Total' includes the impact of cash & equivalents, G7 and other investments not presented in chart above such as hedge-related transactions.

Peer group comparison (as at 31-Mar-17): Ashmore EM Blended Debt Composite



Universe: Emerging Mkts Fixed Income - Blended Currency

	MRQ		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
5th Percentile	7.76		16.54		9.49		5.94		6.31		7.62		9.33	
25th Percentile	6.05		12.80		6.67		4.79		4.82		6.23		8.00	
Median	5.47		9.71		4.91		2.19		3.04		5.05		7.25	
75th Percentile	4.58		8.48		4.12		1.51		2.18		4.11		5.61	
95th Percentile	2.52		3.89		1.44		-0.33		1.18		3.05		4.70	
# of Observations	46		46		44		41		33		19		12	
Composite Benchmark	4.86	72	6.68	87	4.16	74	1.83	62	2.15	76	3.65	92	5.07	81
Ashmore EM Blended Debt Strategy	4.94	67	14.67	13	9.55	5	5.61	10	4.82	25	6.52	22	7.50	45

Results displayed in USD.

Source: evestment Alliance.

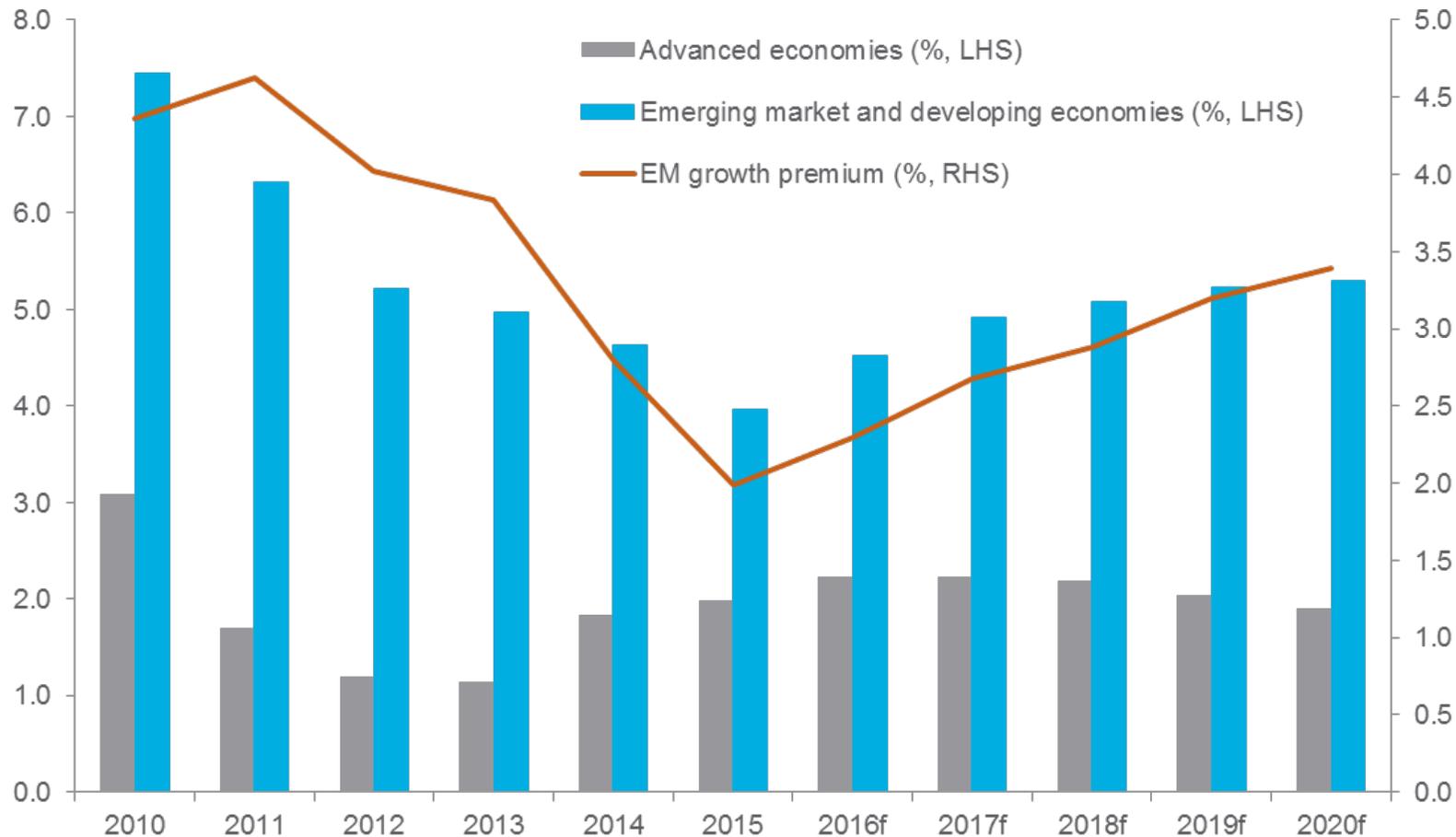
Appendices

Summary: EM recovery now on solid footing

- **A longer-term EM recovery is now underway based on strong fundamentals, good value and light positioning**
- **EM growth premium is back**
 - EM growth looks set to outpace DM growth for the next years due to financial easing and competitiveness
 - Still considerable room for EM to close output gaps before running into inflation problems
 - Sharp improvement in current account balances means reduced reliance on foreign funding (lower vulnerability to exogenous shocks)
- **EM is the safer bet as populism engulfs Developed Markets**
 - EM fundamentals proved resilient in the face of the USD rally, commodity shocks, Taper Tantrum and Fed hikes between 2013-15
 - Remaining EM risks are now few and highly idiosyncratic – best mitigated with active management
 - China tightening cautiously – managed capital accounts lead to less volatility on financial assets than the 2015/16 period
 - Poor risk-reward in Developed Markets dominated by populism, aversion to reform, expensive valuations and little room for stimulus
- **Positioning in EM assets remains extremely light**
 - Light positioning imparts resilience to shocks and greater upside potential
- **Strong EM fixed income value proposition**
 - EM fixed income yields are high in nominal and real terms and compared to developed markets
- **EM currencies have significant upside after 5 years of decline**
 - EM FX began to outperform the USD in 2016 with significant upside from here

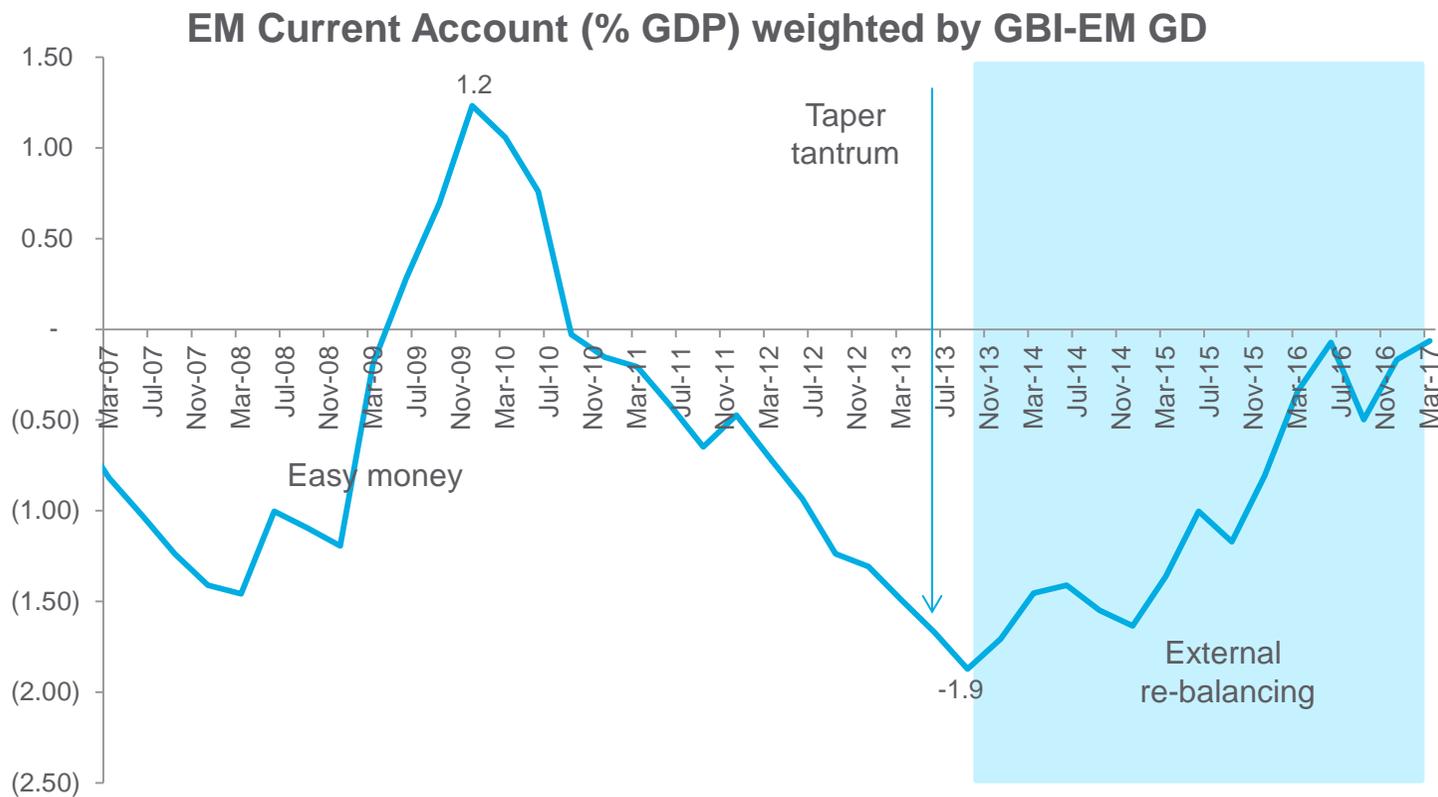
The EM growth premium has been rising for more than a year despite tight financial conditions...

Real GDP growth (%)



Source: IMF, Ashmore. Data as of March 2015

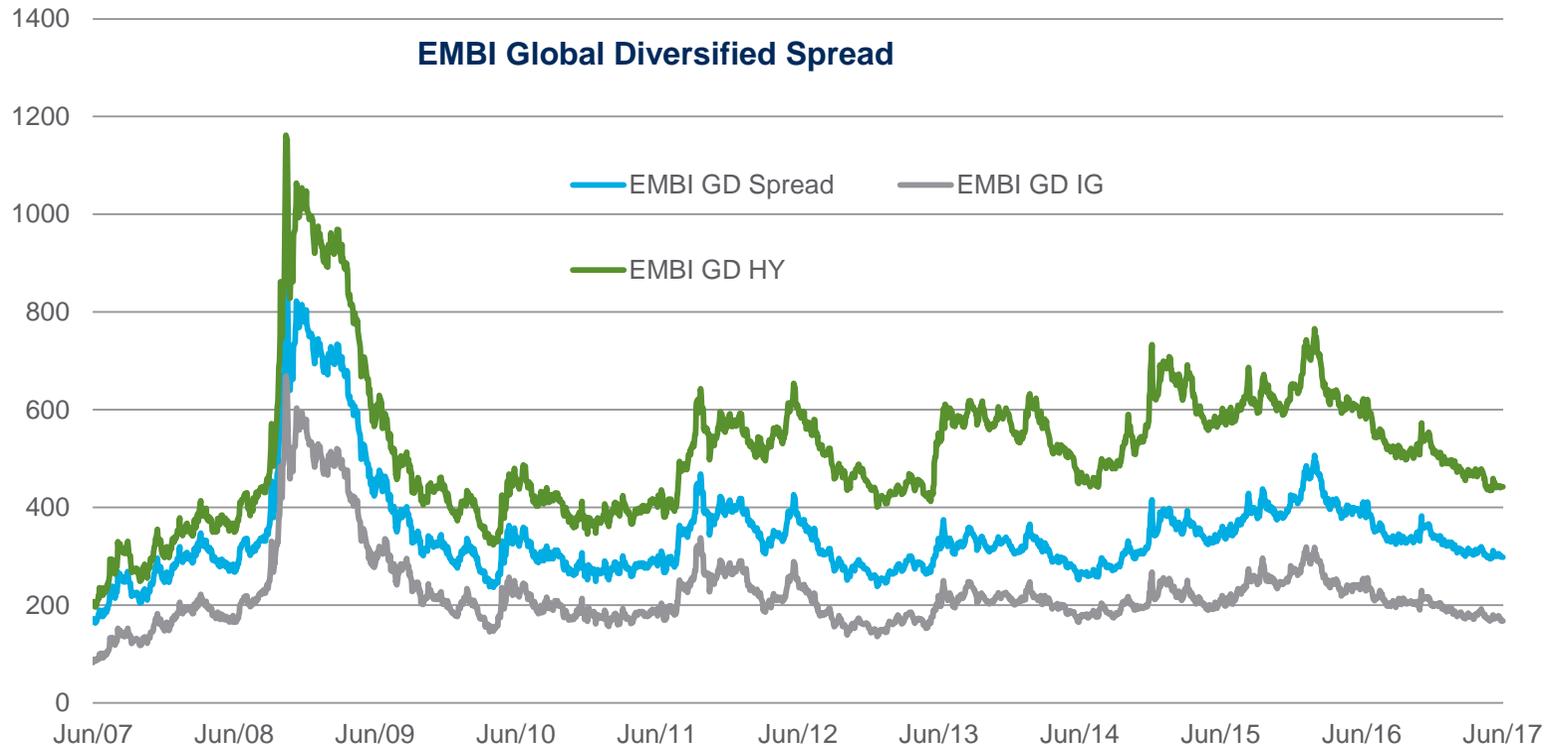
External Rebalance (3): Current Account deficit has closed



Source: Ashmore, JP Morgan, Bloomberg. Data 31 Dec 17

External Debt: Attractive valuations on high yield

Sovereign spreads (bps over corresponding duration on US Treasury curve)



Source: Ashmore, JP Morgan, Bloomberg. Data as at 12-Jun-2017

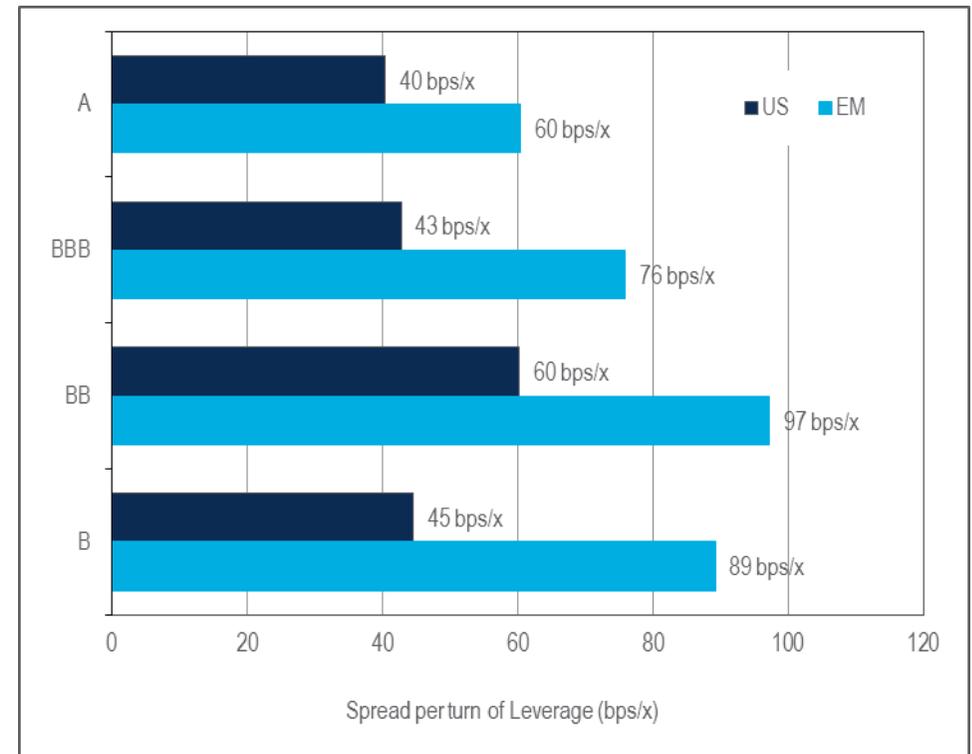
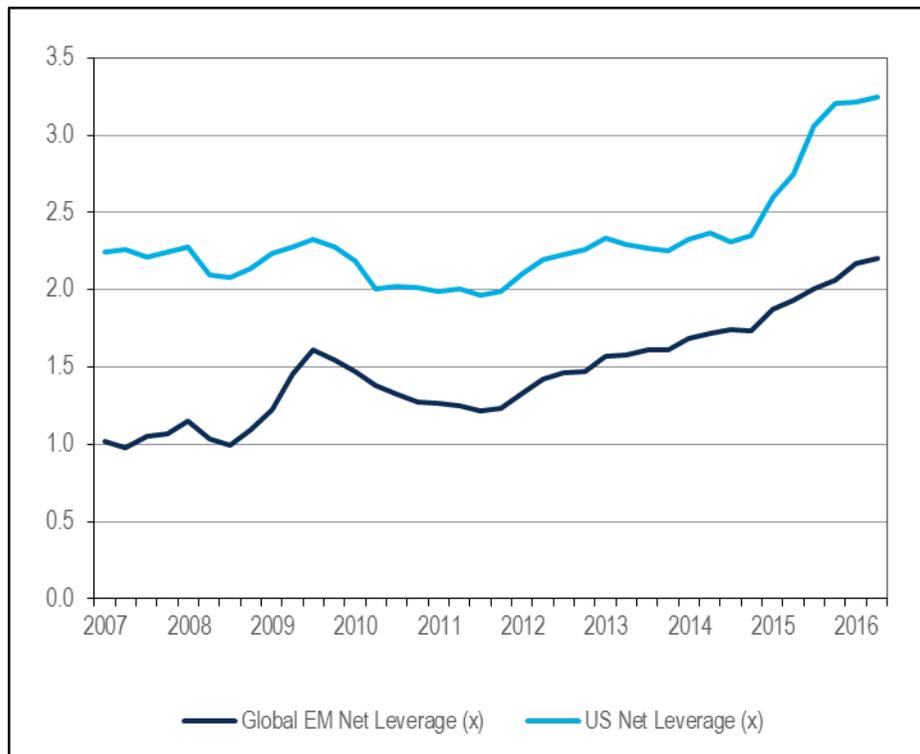
Global backdrop: Long-term investing really pays



Source: Bloomberg, Ashmore, Federal Reserve as of December 2016. Note: EMLIP is Ashmore's longest running fixed income fund. EMLIP returns are net of fees. Berkshire Hathaway and S&P500 returns are total returns.

Historically lower leverage than their developed markets' counterparts

- Emerging Markets corporations have historically operated in a different environment, where leverage has been a result of their operating and investment needs, not a result of LBOs and financial engineering
- Thus, historically their financial leverage (Total Debt/EBITDA) has been significantly lower
- After factoring their wider credit spread, investors can get nearly twice as much compensation per 'turn of leverage' in Emerging Markets high yield debt then in US high yield debt



Source: BAML. Net Leverage data as at 30-Jun-16. Spread per turn of leverage data as at 31-Dec-2016.

Ashmore EM Blended Debt Composite

December 31, 2016 (please refer to 'Notes' on the next page)

Period	Composite Gross Return	Benchmark Return	Number of Portfolios	Annual Composite Dispersion	Total Assets at End of Period (USD million)	Firm Assets at End of Period (USD million)	Percentage of Firm's Assets	3 Year Std. Deviation Composite	3 Year Std. Deviation Benchmark
2003*	10.82%	6.19%	1	NA	277	4,920	5.63%	NA	NA
2004	22.09%	15.24%	1	NA	560	8,100	6.91%	NA	NA
2005	17.29%	7.49%	2	NA	827	16,800	4.92%	NA	NA
2006	16.29%	11.85%	2	NA	958	26,800	3.57%	7.79%	5.81%
2007	12.66%	11.53%	2	NA	1,508	36,400	4.14%	6.41%	5.19%
2008	-15.78%	-8.21%	2	NA	1,068	24,500	4.36%	13.01%	11.49%
2009	35.49%	23.24%	2	NA	1,670	31,300	5.34%	14.01%	12.29%
2010	17.06%	11.47%	5	NA	9,019	45,900	19.65%	14.71%	12.78%
2011	5.20%	1.87%	9	3.41%	11,312	52,600	21.51%	10.01%	8.89%
2012	18.72%	14.78%	11	1.89%	14,568	64,600	22.55%	8.82%	8.32%
2013	-6.14%	-5.37%	17	0.55%	16,588	74,500	22.27%	8.61%	8.59%
2014	-0.36%	0.35%	18	2.40%	15,181	63,100	24.06%	8.23%	7.80%
2015	-1.49%	-5.21%	18	2.37%	10,326	48,500	21.29%	7.73%	6.89%
2016	17.00%	8.50%	18	1.57%	11,327	50,700	22.34%	8.35%	7.31%

*partial period return since inception (1st Jul 03).

Prospective investors should obtain and review the offering documents relating to the units or shares of any Fund, including the description of risk factors/investment considerations contained in the offering documents, prior to making any decision to invest in such units or shares.

Ashmore EM Blended Debt Composite

Notes

1. The Firm is defined as all portfolios managed by Ashmore Group plc and by its majority owned subsidiaries.
2. Ashmore claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Ashmore has been independently verified from 1 January 2014 to 30 June 2016. Prior to 31 December 2013, Ashmore's separate investment advisory businesses Ashmore Investment Management Ltd ("AIML") and Ashmore Equities Investment Management (US) LLC ("AEIM") existed as two separate Firms which were compliant as separate entities to 31 December 2013 and were independently verified from 25 February 1999 until 31 December 2013 and from 1 January 1994 until 31 December 2013 respectively. The verification report(s) is/are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.
3. The Blended Debt Composite includes all discretionary portfolios that invest primarily in Global Emerging Market hard and local currency denominated assets across sovereign, quasi-sovereign and corporate instruments.
4. This composite was created in June 2011.
5. The benchmark presented is a monthly rebalanced composite benchmark (50% JP Morgan Emerging Market Bond Index Global Diversified; 25% JP Morgan Emerging Local Markets Index Plus; 25% JP Morgan Government Bond Index Emerging Markets Global Diversified). Ashmore is benchmark-aware and the benchmark is shown for information purposes only.
6. Composite and benchmark performance presented is in USD.
7. Composite results for the full historical period are time-weighted and include reinvestment of dividends and other earnings.
8. Returns are presented gross of management (advisory) fees, performance fees (where relevant), custodial fees and other expenses but net of all trading expenses and non-reclaimable withholding taxes. Actual returns and performance for each investor will vary depending on the applicable fee schedule. For example, if \$100,000 were invested and experienced a 10% annual return compounded quarterly for ten years, its ending dollar value without giving effect to the deduction of advisory fees would be \$268,506 with an annualised compounded return of 10.38%. If an advisory fee of 1.50% of average net assets per year were deducted quarterly for the ten-year period, the annualised compounded return would be 8.77% and the ending dollar value would be \$231,890. Additional information about advisory fees is found in Part II of AIML's Form ADV.
9. For the underlying funds/accounts, the highest applicable standard fixed management fee is 1.10% per annum (performance fees may apply).
10. The policies for valuing the underlying funds/accounts which are set out in each respective prospectus/scheme particulars/investment management agreement and the methodology for calculating performance and preparing compliant presentations are available upon request.
11. The composite may deal in options on margin or otherwise and sell investments short for efficient portfolio management purposes or to hedge. Borrowing is permitted within restrictions imposed by the component portfolios as set out in each fund's scheme particulars/account's investment management agreement.
12. The dispersion of the composite is measured using equal-weighted standard deviation and has only been calculated for periods where there are more than 5 portfolios in the composite with full-period annual returns.
13. The three-year annualised ex-post standard deviation measures the variability of the composite (gross) and the benchmark returns over the preceding 36-month period where available and the calculation assumes the composite and the benchmark time weighted return follows a log-normal distribution.
14. Additional information regarding the firm's full set of composites and their description is available upon request - please contact Ashmore Marketing Services (Tel: +44 20 3077 6060; Email: ashmail@ashmoregroup.com).

Presenters:

- **David Muller**, Portfolio Manager, joined the investment team in November 2015. He has been with Ashmore since April 2012 as a member of the Institutional Account Management team. Prior to joining Ashmore, he was Director of Business Development at The Rohatyn Group, marketing Emerging Markets alternative products to, and supporting institutional clients in, North America. His prior experience includes Morgan Stanley Investment Management, Fisher Francis Trees & Watts, Alecta Investment Management and JP Morgan Investment Management. David received a BA in International Relations from Brown University, a Masters of European Law from the Europa Institut/Universitaet des Saarlandes in Saarbruecken, Germany, and an MBA from the University of Chicago Graduate School of Business. He is licensed as a Series 7 and Series 63 Registered Representative.
- **John Ricketts**, Distribution, joined Ashmore in 2013. John has been working since 2011 at Aviva investors. Prior to this, from 2007 John worked at Credit Suisse Asset Management and was part of the traditional asset management business acquired by Aberdeen Asset Management. John is a graduate of The Ohio State University and a current CFA candidate. He is also a Series 7 Registered Representative and a Series 24 Registered Securities Principal.



DISCUSSION SHEET

ITEM #C8

Topic: Deferred Retirement Option Plan (DROP) annuitization rollovers

Attendees: Robert Gauss, Ice Miller
Eric Dawes, Ice Miller

Discussion: HB 3158 provides that DROP accounts will be annuitized over the life expectancy of each DROP participant. In the case of retirees and other non-active member DROP participants this annuitization occurs as soon as practicable after September 1. In the case of active members this annuitization occurs upon retirement. Many retirees have questioned why these annuity payments can't be rolled over to another tax deferred account. Tax counsel will be present to provide the reasons for such treatment and to answer any questions the Board may have.



DISCUSSION SHEET

ITEM #C9

Topic: Violation of federal law (USERRA) by the City of Dallas

Discussion: Staff will provide an update of discussions on this topic with the City of Dallas.



DISCUSSION SHEET

ITEM #C10

Topic: Legal issues

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

- a. Police Officer and Firefighter pay lawsuits
- b. Potential claims involving fiduciaries and advisors
- c. Eddington et al. v. DPF
- d. Rawlings v. DPF
- e. DPF v. Columbus A. Alexander III
- f. Degan et al. v. DPF (Federal suit)
- g. City of Dallas violation of USERRA
- h. Internal Revenue Service Voluntary Compliance Program

Discussion: Counsel will brief the Board on these issues.



DISCUSSION SHEET

ITEM #C11

Topic: Investment reports

Discussion: Review of investment reports.

Dallas Police and Fire Pension System - Net of Fees

Returns By Category
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,102,323,243	100.00	0.75	1.02	1.33	2.73	(3.28)	1.67		01-Jan-1995
Equity	499,451,900	23.76	1.42	1.32	3.57	3.62				01-Jan-2016
MSCI AC 66.7%/EM 16.7%/R3000+3 16.7%			2.18	3.83	11.45	19.60				
Excess Return			(0.76)	(2.51)	(7.89)	(15.98)				
Global Equity	188,441,097	8.96	3.03	6.20	14.55	20.35	7.26	12.96		01-Jul-2009
MSCI ACWI			2.30	3.94	11.26	18.17	5.89	12.12		
Excess Return			0.74	2.27	3.29	2.18	1.37	0.85		
Private Equity	311,010,803	14.79	0.48	(1.37)	(1.87)	(4.41)				01-Jan-2016
Russell 3000 +3%			1.28	2.60	9.29	21.22				
Excess Return			(0.79)	(3.97)	(11.15)	(25.63)				
Fixed Income	235,654,336	11.21	0.88	1.56	0.35	5.24				01-Jan-2016
Fixed Income Blended			0.88	1.91	4.58	9.06				
Excess Return			0.00	(0.35)	(4.24)	(3.82)				
Global Bonds	63,254,110	3.01	1.10	2.00	6.65	4.70				01-Jan-2016
Bloomberg Barclays Global Aggregate			1.55	2.69	4.50	0.77				
Excess Return			(0.45)	(0.69)	2.15	3.94				
High Yield	79,507,545	3.78	0.65	1.60	5.43	17.90				01-Jan-2016
Bloomberg Barclays Global High Yield			1.26	3.01	6.28	12.74				
Excess Return			(0.61)	(1.41)	(0.85)	5.16				
Bank Loans	57,557,710	2.74	0.51	0.86	2.44	9.53				01-Jan-2016
S&P Leveraged Loan Index			(0.01)	0.07	0.23	5.22				

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Returns By Category
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
<i>Excess Return</i>			0.52	0.79	2.21	4.31				
EM Debt	19,022,817	0.90	1.32	1.99	10.27	7.82				01-Jan-2016
<i>EM Debt Blended</i>			1.42	2.77	8.09	11.00				
<i>Excess Return</i>			(0.10)	(0.78)	2.18	(3.18)				
Private Debt	16,312,154	0.78	1.95	1.65	(19.16)	(17.44)				01-Jan-2016
<i>Bloomberg Barclays Global High Yield +2%</i>			1.43	3.35	7.16	14.99				
<i>Excess Return</i>			0.52	(1.70)	(26.32)	(32.43)				
Global Asset Allocation (GAA)	137,491,413	6.54	0.51	(0.03)	3.35	11.79	3.62	4.39		01-Jul-2007
<i>GAA Blended</i>			1.66	2.87	7.04	9.06	3.22	6.51		
<i>Excess Return</i>			(1.15)	(2.91)	(3.69)	2.73	0.40	(2.12)		
Absolute Return	36,890,529	1.75	0.00	(3.91)	(3.48)	(9.93)				01-Jun-2016
<i>HFRX Absolute Return Index</i>			0.32	0.62	1.28	1.65				
<i>Excess Return</i>			(0.32)	(4.53)	(4.75)	(11.58)				
Risk Parity	78,688,852	3.74	0.59	1.25	5.77	10.52				01-Jan-2016
<i>MSCI ACWI 60%/Bloomberg Barclays Global Aggregate 40%</i>			2.00	3.44	8.52	10.97				
<i>Excess Return</i>			(1.40)	(2.19)	(2.75)	(0.45)				
GTAA	21,912,032	1.04	1.08	2.26	7.28	8.90				01-Jan-2016
<i>MSCI ACWI 60%/Bloomberg Barclays Global Aggregate 40%</i>			2.00	3.44	8.52	10.97				
<i>Excess Return</i>			(0.92)	(1.18)	(1.24)	(2.06)				
Real Assets	963,740,234	45.84	0.59	1.14	0.50	(0.57)				01-Jan-2016

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Returns By Category
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Natural Resources	267,266,599	12.71	(0.54)	1.62	1.23	3.51	3.12	6.85		01-Jul-2009
Infrastructure	144,956,441	6.90	1.90	1.37	3.88	1.47	(1.79)			01-Jul-2012
S&P Global Infrastructure Index			4.27	6.03	14.46	16.27	4.82			
Excess Return			(2.36)	(4.67)	(10.57)	(14.81)	(6.62)			
Real Estate	551,517,194	26.23	0.73	0.80	(0.91)	(3.02)				01-Jan-2016
NCREIF Property			0.00	0.00	1.55	7.27				
Excess Return			0.73		(2.46)	(10.29)				
Control/Holding Account	345,985,359	16.46	0.08	0.17	0.36	0.61	0.30	0.24		01-Jan-1994
Merrill Lynch 3 Month US T-BILL			0.05	0.11	0.22	0.44	0.21	0.16	0.61	
Excess Return			0.03	0.06	0.14	0.18	0.09	0.08		
Master Loans	(80,000,000)	(3.81)								01-Mar-2014

Dallas Police and Fire Pension System - Net of Fees

Equity
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,102,323,243	100.00	0.75	1.02	1.33	2.73	(3.28)	1.67		01-Jan-1995
Equity	499,451,900	23.76	1.42	1.32	3.57	3.62				01-Jan-2016
MSCI AC 66.7%/EM 16.7%/R3000+3 16.7%			2.18	3.83	11.45	19.60				
<i>Excess Return</i>			(0.76)	(2.51)	(7.89)	(15.98)				
Global Equity	188,441,097	8.96	3.03	6.20	14.55	20.35	7.26	12.96		01-Jul-2009
MSCI ACWI			2.30	3.94	11.26	18.17	5.89	12.12		
<i>Excess Return</i>			0.74	2.27	3.29	2.18	1.37	0.85		
OFI	89,362,720	4.25	3.08	6.91	17.12	23.52	7.09	14.48		01-Sep-2007
MSCI ACWI			2.30	3.94	11.26	18.17	5.89	12.12		
<i>Excess Return</i>			0.78	2.97	5.85	5.35	1.20	2.36		
Walter Scott and Partners	98,842,495	4.70	2.99	5.58	12.57	15.81	6.74	11.54		01-Dec-2009
MSCI ACWI			2.30	3.94	11.26	18.17	5.89	12.12		
<i>Excess Return</i>			0.70	1.65	1.31	(2.36)	0.85	(0.58)		
Pyramis Global Advisors (Fidelity)	145,375	0.01								01-Apr-2002
RREEF REIT	90,506	0.00								01-Jan-1999
Private Equity	311,010,803	14.79	0.48	(1.37)	(1.87)	(4.41)				01-Jan-2016
Russell 3000 +3%			1.28	2.60	9.29	21.22				
<i>Excess Return</i>			(0.79)	(3.97)	(11.15)	(25.63)				
Bankcap Partners	6,909,996	0.33	(6.70)	(6.70)	77.53	84.86	19.21	12.78		01-Feb-2007
Hudson Clean Energy Partners LP	10,715,535	0.51	0.00	(20.63)	(20.63)	(40.43)	(16.62)	(15.90)		01-Aug-2009

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Equity As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Huff Alternative Fund LP	31,971,644	1.52	0.40	1.42	2.52	14.59	3.00	4.38		01-Jun-2001
Huff Energy Fd	131,208,655	6.24	0.00	0.00	0.00	19.14	(13.35)	(2.63)		31-Dec-2006
Industry Ventures Partnership Holdings IV LP	1,101,063	0.05	0.00	(2.98)	(2.98)					15-Jul-2016
Lone Star CRA Fund LP	60,284,756	2.87	1.25	(0.08)	(0.08)	(36.60)	(25.82)	(5.11)		01-Jul-2008
Lone Star Growth Capital	10,457,732	0.50	2.59	(2.73)	(2.73)	(17.71)	1.53	(3.02)		31-Dec-2006
Lone Star Opportunities Fund V LP	56,087,353	2.67	1.86	3.24	3.24	(34.27)	(9.28)	11.33		01-Jan-2012
North Texas Opportunity Fund LP	2,098,971	0.10	0.00	0.00	(54.05)	(58.41)	(39.60)	(24.50)		01-Aug-2000
Pharos Capital	66,474	0.00	(6.20)	(97.67)	(97.67)	(98.78)	(77.36)	(56.00)		30-Aug-2005
Yellowstone Energy Ventures II LP	108,624	0.01	(5.31)	(5.31)	(5.29)	(1.00)	(35.66)	(33.99)		01-Sep-2008

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Fixed Income
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,102,323,243	100.00	0.75	1.02	1.33	2.73	(3.28)	1.67		01-Jan-1995
Fixed Income	235,654,336	11.21	0.88	1.56	0.35	5.24				01-Jan-2016
Fixed Income Blended			0.88	1.91	4.58	9.06				
Excess Return			0.00	(0.35)	(4.24)	(3.82)				
Global Bonds	63,254,110	3.01	1.10	2.00	6.65	4.70				01-Jan-2016
Bloomberg Barclays Global Aggregate			1.55	2.69	4.50	0.77				
Excess Return			(0.45)	(0.69)	2.15	3.94				
Brandywine Investment Management	63,254,110	3.01	1.10	2.00	6.65	4.75	0.16	2.68		01-Jan-2005
Bloomberg Barclays Global Aggregate Index			1.55	2.69	4.50	0.77	(0.08)	0.89	3.66	
Excess Return			(0.45)	(0.69)	2.15	3.98	0.24	1.79		
High Yield	79,507,545	3.78	0.65	1.60	5.43	17.90				01-Jan-2016
Bloomberg Barclays Global High Yield			1.26	3.01	6.28	12.74				
Excess Return			(0.61)	(1.41)	(0.85)	5.16				
Loomis Sayles Global Opportunity	79,507,545	3.78	0.65	1.60	5.53	19.03	3.64	7.88		01-Nov-1998
70% Merrill High Yield / 30% JPM Emerging Markets			0.91	2.18	5.31	12.63	4.82	6.92	7.25	
Excess Return			(0.26)	(0.58)	0.22	6.40	(1.18)	0.96		
Bank Loans	57,557,710	2.74	0.51	0.86	2.44	9.53				01-Jan-2016
S&P Leveraged Loan Index			(0.01)	0.07	0.23	5.22				
Excess Return			0.52	0.79	2.21	4.31				
Loomis Sayles Senior Floating Rate and Fixed Income Trust	57,557,710	2.74	0.51	0.86	2.44	9.53	3.85			01-Nov-2013
S&P Leveraged Loan Index			(0.01)	0.07	0.23	5.22	(0.17)			
Excess Return			0.52	0.79	2.21	4.31	4.02			

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Fixed Income
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
EM Debt	19,022,817	0.90	1.32	1.99	10.27	7.82				01-Jan-2016
EM Debt Blended			1.42	2.77	8.09	11.00				
<i>Excess Return</i>			<i>(0.10)</i>	<i>(0.78)</i>	<i>2.18</i>	<i>(3.18)</i>				
Ashmore Emerging Markets Local Currency Bond Fund	19,022,817	0.90	1.32	1.99	10.04	14.31	(2.53)	0.38		01-Mar-2011
JP Morgan GBI-EM Global Diversified			1.96	3.15	9.86	12.16	(2.63)	0.32		
<i>Excess Return</i>			<i>(0.64)</i>	<i>(1.16)</i>	<i>0.19</i>	<i>2.14</i>	<i>0.10</i>	<i>0.06</i>		
Private Debt	16,312,154	0.78	1.95	1.65	(19.16)	(17.44)				01-Jan-2016
Bloomberg Barclays Global High Yield +2%			1.43	3.35	7.16	14.99				
<i>Excess Return</i>			<i>0.52</i>	<i>(1.70)</i>	<i>(26.32)</i>	<i>(32.43)</i>				
Highland Capital Management Note Due 12-31-2017	6,215,935	0.30	0.00	0.00	0.00	4.40	0.55	12.67		01-Dec-2006
Highland Crusader Fund LP	2,578,506	0.12	(0.61)	(2.32)	(4.65)	(30.30)	(7.88)	(3.32)		01-Aug-2003
Oaktree Fund IV & 2x Loan Fund	153,937	0.01	83.88	83.88	(73.01)	(72.26)	(40.37)	(24.07)		01-Jan-2002
Riverstone Credit Partners LP	7,363,775	0.35	2.70	2.70	4.28	23.69				01-Jun-2016

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Asset Allocation
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,102,323,243	100.00	0.75	1.02	1.33	2.73	(3.28)	1.67		01-Jan-1995
Global Asset Allocation (GAA)	137,491,413	6.54	0.51	(0.03)	3.35	11.79	3.62	4.39		01-Jul-2007
GAA Blended			1.66	2.87	7.04	9.06	3.22	6.51		
Excess Return			(1.15)	(2.91)	(3.69)	2.73	0.40	(2.12)		
Absolute Return	36,890,529	1.75	0.00	(3.91)	(3.48)	(9.93)				01-Jun-2016
HFRX Absolute Return Index			0.32	0.62	1.28	1.65				
Excess Return			(0.32)	(4.53)	(4.75)	(11.58)				
Bridgewater-Pure Alpha Major Markets	36,890,529	1.75	0.00	(3.91)	(3.47)	14.98	5.71	7.55		01-Aug-2011
Risk Parity	78,688,852	3.74	0.59	1.25	5.77	10.52				01-Jan-2016
MSCI ACWI 60%/Bloomberg Barclays Global Aggregate 40%			2.00	3.44	8.52	10.97				
Excess Return			(1.40)	(2.19)	(2.75)	(0.45)				
Bridgewater All Weather	41,860,708	1.99	0.54	1.85	5.52	10.83	3.59	4.56		01-May-2007
Putnam Total Return	36,828,144	1.75	0.66	0.58	6.14	8.62	2.33	3.81		01-Dec-2009
GTAA	21,912,032	1.04	1.08	2.26	7.28	8.90				01-Jan-2016
MSCI ACWI 60%/Bloomberg Barclays Global Aggregate 40%			2.00	3.44	8.52	10.97				
Excess Return			(0.92)	(1.18)	(1.24)	(2.06)				
GMO	21,912,032	1.04	1.08	2.26	7.28	8.90	1.73	4.34		01-May-2007

Performance shown is net of manager fees

Dallas Police and Fire Pension System - Net of Fees

Real Assets
As of May 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,102,323,243	100.00	0.75	1.02	1.33	2.73	(3.28)	1.67		01-Jan-1995
Real Assets	963,740,234	45.84	0.59	1.14	0.50	(0.57)				01-Jan-2016
Natural Resources	267,266,599	12.71	(0.54)	1.62	1.23	3.51	3.12	6.85		01-Jul-2009
Infrastructure	144,956,441	6.90	1.90	1.37	3.88	1.47	(1.79)			01-Jul-2012
S&P Global Infrastructure Index			4.27	6.03	14.46	16.27	4.82			
Excess Return			(2.36)	(4.67)	(10.57)	(14.81)	(6.62)			
J.P. Morgan AIRRO II	4,217,778	0.20	0.87	0.87	(5.77)	(14.70)	(13.20)			01-Mar-2014
JP Morgan Global Maritime Investment Fund	28,958,495	1.38	6.30	2.71	2.71	(23.30)	(17.28)	(35.12)		01-Jun-2010
JP Morgan IIF Tax-Exempt LP	512	0.00	1.35	1.35	0.85	1.44	1.73	3.76		01-Oct-2007
JPM Asian Infras And Related Resources Oppor Fd	24,808,078	1.18	4.73	4.73	29.13	31.80	5.83	7.20		01-Aug-2008
LBJ Infrastructure Group Holdings LLC	44,346,035	2.11	0.00	0.00	0.00	0.00	0.00	0.00		01-Jun-2010
NTE Mobility Partners	42,625,545	2.03	0.00	0.00	0.00	0.00	0.00	0.00		01-Dec-2009
Real Estate	551,517,194	26.23	0.73	0.80	(0.91)	(3.02)				01-Jan-2016
NCREIF Property			0.00	0.00	1.55	7.27				
Excess Return			0.73		(2.46)	(10.29)				

Performance shown is net of manager fees

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DISCUSSION SHEET

ITEM #C12

Topic: 2017 Budget adjustment – Public relations

Discussion: Staff will brief the Board on public relations expenses incurred year to date as compared to the budgeted amount, as well as proposed additional services in this area for the remainder of 2017.

	2017 Budget	Incurred as of 6/30/17	Proposed Revised Amount
Public relations	\$ 220,000	\$ 230,000	\$ 290,000

Staff Recommendation: Approve the proposed increase in the budget for public relations for 2017.



DISCUSSION SHEET

ITEM #C13

Topic: Employee recognition – Second Quarter 2017

- a. Employee Service Award
- b. Employee of the Quarter award

Discussion: a. The Chairman will present service awards for the Second Quarter 2017 to the following:

Ryan P. Wagner 5 Years
Cynthia J. Reyes 10 Years
Aimee M. Crews 10 Years

- b. The Chairman will present a performance award for Employee of the Quarter, Second Quarter 2017.



DISCUSSION SHEET

ITEM #C14

Topic: Closed Session - Board serving as Medical Committee

Discussion of the following will be closed to the public under the terms of Section 551.078 of the Texas Government Code:

Disability application

Discussion: Staff will present an application for an Off-Duty disability pension for consideration by the Board in accordance with Section 6.03 of the Plan. Documentation will be available at the meeting.



DISCUSSION SHEET

ITEM #C15

Topic: Unforeseeable Emergency Requests from DROP Members

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.078 of the Texas Government Code.

Discussion: The Executive Director will review with the Board for their consideration any applications under the DROP Unforeseeable Emergency Policy that have not been approved.

Staff

Recommendation: To be provided at the meeting.



DISCUSSION SHEET

ITEM #C16

Topic: Possible sale of Lone Star Investment Advisors interests

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

Discussion: DPFP has received an offer to sell its limited partner interests in the Lone Star CRA Fund, Lone Star Opportunities Fund V and Lone Star Growth Capital private equity funds which are managed by Lone Star Investment Advisors, LLC (“LSIA”). The Evercore Group was engaged in October of 2016 to facilitate a sale of several DPFP private investments, including the LSIA managed funds.

DPFP has committed a combined \$141 million to the three funds which specialize in leveraged acquisitions, mezzanine financing, management buyouts, distressed, turnaround investments and corporate spin-offs, growth equity and recapitalizations of strategically viable, lower middle-market businesses.

Staff Recommendation: Available at meeting.



DISCUSSION SHEET

ITEM #D1

Topic: Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System

Discussion: This is a Board-approved open forum for active members and pensioners to address their concerns to the Board and staff.



DISCUSSION SHEET

ITEM #D2

Topic: Executive Director's report

Associations' newsletters

- NCPERS Monitor (June 2017)

Discussion: The Executive Director will brief the Board regarding the above information.

MONITOR

In This Issue

2 Executive Directors Corner

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Destruction is the new obstruction on Capitol Hill. That's the signal Congress sent in early May when it killed Department of Labor rules designed to give millions of gainfully employed Americans access to urgently needed workplace retirement savings plans.

4 Economic Growth Will Suffer

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Americans will be worse off in the future if politicians continue to chip away at public pensions in a frantic effort to paper over their own fiscal mistakes. That is the conclusion of a new NCPERS study, which takes stock of the economic impact that steadily dismantling public sector pensions would have by the year 2025 if current approaches continue unchecked.

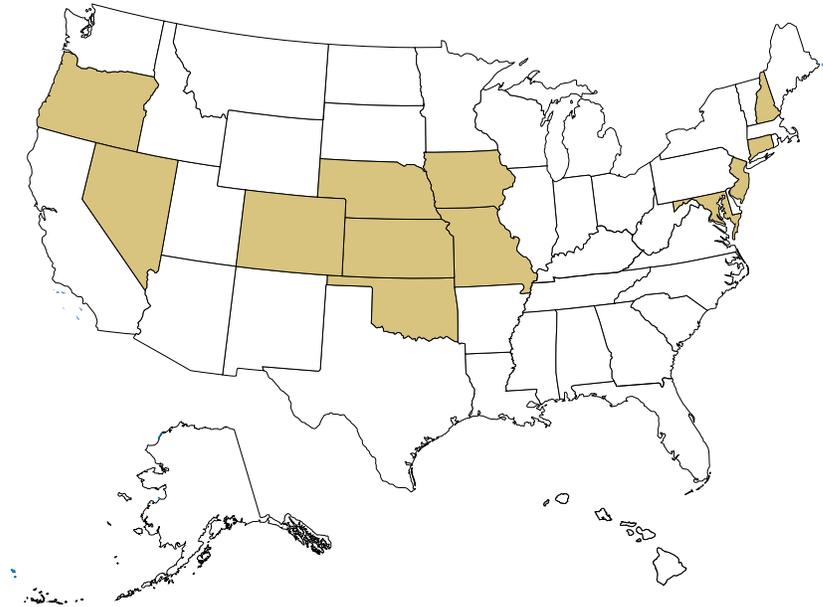
5 Congressional Agenda

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It's too early to say that the Congressional agenda is so gridlocked that nothing of significance will be enacted this year, but the agenda is on the skids and the timetable for action keeps getting pushed back.

State Update



As previously reported, 2017 has been a busy year for the Republican majorities in state legislatures. On the positive side, we are happy to report that negative public pension bills in Colorado, Connecticut, Iowa, Maryland, Nebraska, Nevada, New Hampshire, and Oregon did not advance. Unfortunately, we saw negative pension bills pass in Oklahoma and Kansas. Details on specific state legislation is as follows:



Colorado: As previously reported, multiple bills were in front of the Senate and House, and they were all defeated. House Bill (HB) 17-1114, the bill that would allow the state treasurer to access all information and records related to the Public Employees' Retirement Association (PERA), was postponed indefinitely on March 1 to the House Committee on State, Veterans, & Military Affairs. Senate Bill (SB) 113 was also postponed indefinitely to the House Committee on State, Veterans, & Military Affairs on March 1. The bill would have capped employer rates at their current percentage as of January 1, 2018. SB 158 was postponed indefinitely to the House Committee on State, Veterans, & Military Affairs on March 15. The bill would have made changes to the composition of PERA's board.



Connecticut: On January 26, Senator Leonard Fasano (R) introduced SB 746; the bill would implement pension reform for the Municipal Employee Retirement System of Connecticut. The bill, for newly hired employees, would: exclude overtime from retirement benefit calculations, increase the

[CONTINUED ON PAGE 3](#)



Loss of Safe Harbor Won't Deter State Push for Private Sector Retirement Solutions

Destruction is the new obstruction on Capitol Hill. That's the signal Congress sent in early May when it killed Department of Labor rules designed to give millions of gainfully employed Americans access to urgently needed workplace retirement savings plans.

The fact that 55 million Americans – half the private sector workforce – currently lack access to a pension or retirement plan at work apparently didn't matter to the majority in Congress. Nor were they moved by the fact that multiple states spent years analyzing, developing, and creating programs inspired by NCPERS' Secure Choice Pension model. Senate Majority Leader Mitch McConnell (R-KY) swept aside arguments against repeal laid out for him by officials from 22 states with both Republican and Democratic majorities. We saw publicly traded multinational conglomerates, in the form of the American Benefits Council, pile on in favor of repeal, even though these companies are unaffected by the state programs.

In the end, without so much as a hearing, Congress caved to pressure from big financial companies to try to kill state-facilitated retirement savings plans. The underlying truth is that Wall Street suddenly felt threatened when the states came up with a solution that had eluded it for decades: Workplace retirement plans that would help ordinary people save and wouldn't financially burden small businesses.

The hypocrisy is breathtaking. Lawmakers who claim to favor private-sector solutions and state autonomy invoked an obscure method of repeal to try to strike down partnerships that promote both. The mere fact that the Obama Administration developed the ERISA safe harbor rules was red meat to many who voted by thin majorities to overturn the rules, on a vote of 50-49 in the Senate on May 3 and 231-193 in the House on February 15.

But let not's despair. The loss of the safe harbor is a setback, not a calamity.

While these rules were helpful for plans with auto-enrollment features, they were not essential to the creation of state-facilitated



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workplace retirement savings plans, which have been gaining steam since 2011. States and cities were marching ahead with their plans before the Department of Labor rules were lawfully promulgated, and they will continue to do so now that the rules have been recklessly repealed. California has vowed to proceed with its Secure Choice Retirement Savings Program, which promises to be the largest in the nation. Connecticut, Illinois, Maryland, New Jersey, Oregon, and Washington had already adopted legislation to create new savings programs before the safe harbor was created, and have given no indication that they will shift course.

In the end, without so much as a hearing, Congress caved to pressure from big financial companies to try to kill state-facilitated retirement savings plans. The underlying truth is that Wall Street suddenly felt threatened when the states came up with a solution that had eluded it for decades: Workplace retirement plans that would help ordinary people save and wouldn't financially burden small businesses.

As these state-facilitated plans take shape, NCPERS will be there to champion them because we embrace retirement security for all. We will stand firm if and when the defense of these innovative plans moves to the courts. We believe retirement security for all is the best path to strengthening civic harmony and faith in the American dream.

We are taking the long view, as the pension community always does, because we see an urgent and growing need for positive action, not the obstruction and destruction dished up by Congress. ♦

retirement age to 62, limited the cost-of-living adjustments (COLAs) to zero to four percent, increase employee contributions, and create a retirement tier consistent with the state employee retirement system tier III. The bill has been referred to the Joint Committee on Labor and Public Employees, and has not moved. Separately, Sen. Fasano and Sen. Michael McLachlan (R) introduced SB 368 on January 19th. SB 368 calls for removing pensions from the scope of collective bargaining agreements for state employees hired on or after July 1, 2012. The bill would also require all state employees hired on or after July 1, 2012 to participate in a defined contribution system instead of the current defined benefit system. SB 368 had a public hearing on March 17 and has not moved.



Iowa: Senate File (SF) 45 was introduced by Sen. Brad Zaun (R) on January 10 and would create a mandatory defined contribution pension for certain new hire employees (as of July 1, 2019), including some public safety officers.

As of January 19 the bill was in subcommittee and it has not moved.



Kansas: Unfortunately, HB 2052 was signed by Governor Sam Brownback (R) on April 18. The bill freezes Kansas Public Employee Retirement System (KPERs) contributions at the current 2016 levels (approximately \$300 million).



Maryland: As previously reported, there were multiple bills in Maryland to create an optional 401 (k) plan for new state employees, at the request of Governor Larry Hogan (R). HB 1064 bill would have lowered assumptions from 7.55% to 6% for the Teachers' Pension System, and it would lower the state contributions to 5-8%.

The bill was given an unfavorable report by Appropriations on April 10. SB 486 and HB 1072 would have created a cash balance pension plan, for state and teacher employees, where each will contribute 5% and the employee will become vested in three years. They were also given unfavorable reports by Appropriations.



Missouri: SB 62, sponsored by Senator Dan Hegeman (R), requires the retirement plan for employees of public higher education to contribute six percent of payroll to the plan and lowers the vesting period to 5 years, from the current 10 years. The bill was delivered to

Governor Eric Greitens (R) on May 22, and he is expected to sign.



Nebraska: Legislative Bill 30, introduced on January 5 by Sen. Mark Kolterman (R), would require the cities of Lincoln and Oma-

ha to put new public safety hires into a defined contribution pension plan. The Nebraska Retirement Systems Committee held a public hearing on the bill on February 7, but the bill has not moved further.



Nevada: Assembly Bill 71, prefiled on November 17, 2016 and read for the first time on February 6, creates a hybrid retirement plan for new hires of PERS after July 1, 2018. Pursuant to Joint Standing Rule No. 14.31.1, the bill is no longer allowed to progress.



New Hampshire: HB 631, introduced by Rep. Neal Kurk (R) on January 5, would create a cash balance retirement plan for new hires and non-vested employees. The bill has been retained in the Executive Departments and Administration Committee since February 8 and has not moved further.



New Jersey: S 3040, sponsored by Sen. Stephen Sweeney (D), gives control of investments management of the Police and Firemen's Retirement System back to the police and firefighters. The bill passed both houses on March 23.



Oklahoma: HB 1172, would have created an optional defined contribution plan for the all new hires of the teachers' retirement system after July 1, 2018, was killed at the end of February. Unfortunately, SB 242, a bill that will add the State

Treasurer to the Oklahoma Public Employees Retirement System and the Oklahoma Teachers Retirement System, passed on May 15 and was signed by Gov. Mary Fallin (R) on May 19. Separately, HB 1162, which will increase teachers' retirement age from 62 to 67, passed the Senate on April 18 and was signed by Gov. Fallin on April 24.



Oregon: Oregon has two Senate Bills to watch out for, both sponsored by Sen. Tim Knopp and Jeff Kruse (R) on January 9. The first, SB 560, would redirect PERS employees 6% supplemental contribution to the pension. The second bill,

SB 559, would cap final salary benefits to \$100,000, and change final salary calculations from 3 years to 5 years. Both bills been referred to the Ways and Means Committee as of April 20 and have not moved.

Stay tuned and visit www.NCPERS.org for more information on upcoming state pension reform battles. You can visit www.NCPERS.org/legislation%20maps to view our new membership feature. As always, if your state is facing pension reform efforts and you would like NCPERS' help, please let us know. ♦

Economic Growth Will Suffer if Pressure to Dismantle Public Pensions Continues Apace

Americans will be worse off in the future if politicians continue to chip away at public pensions in a frantic effort to paper over their own fiscal mistakes.

That is the conclusion of a new NCPERS study, which takes stock of the economic impact that steadily dismantling public sector pensions would have by the year 2025 if current approaches continue unchecked.

Current approaches that have an unhealthy ripple effect include converting defined-benefit plans to 401(k)-style defined-contribution plans, requiring increased employee contributions, and reducing pension benefits.

Titled “[Economic Loss: The Hidden Cost of Prevailing Pension Reforms](#),” the study found that by 2025, \$19 trillion in total personal income in the U. S. would be reduced by \$3.3 trillion under current approaches. The 4% rate of national economic growth would be dragged down to 3.29%.

Income inequality would also be exacerbated as states make changes that are negative for public pensions. The gap between rich and poor would increase by an average of 15% over 10 years, undermining economic growth to the tune of 18%.

The study identifies strategies that states and municipalities can pursue to adequately fund public pensions without dismantling them.

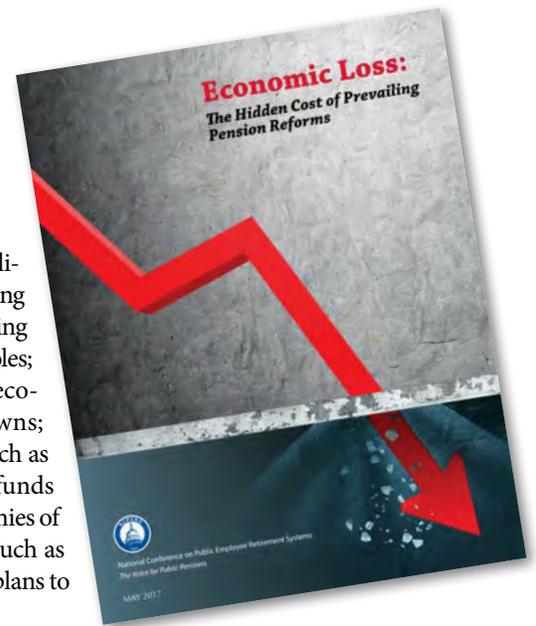
These positive strategies include monetizing assets and drawing dedicated revenue sources rather than general revenue funds; issuing well-

designed pension-obligation bonds; reforming revenue systems; closing of wasteful tax loopholes; managing risks in economic ups and downs; and other options such as using stabilization funds and pursuing economies of scale through steps such as allowing small local plans to join statewide plans.

The study includes a primer on how public pensions fund- ing works. This is valuable, because “a great deal of criticism of public pensions is based on a faulty understanding of how long-term liabilities are funded,” said Michael Kahn, NCPERS director of research and the study’s author. “Opponents of public pensions tend to whip up fear by arguing that cities and states can’t cover their long-term pension liabilities with current revenues. That’s like saying your 30-year mortgage is in trouble if you can’t pay it off from this year’s salary.”

The study also includes detailed state-by-state charts on the economic impact of current approaches to reform, a useful tool that pension system executives can reference in conversations with stakeholders.

Kahn presented the study May 24 at the NCPERS Annual Conference and Exposition in Hollywood, Fla. It is available for download on the website. ♦



Don't Miss NCPERS' Social Media

A promotional banner for NCPERS social media. It features a background image of a hand holding a tablet with a glowing globe and social media icons. The text "Don't Miss NCPERS' Social Media" is prominently displayed at the top. Below the text are six social media icons: Facebook, Twitter, YouTube, LinkedIn, Google+, and RSS. At the bottom right is the NCPERS logo, which includes a circular emblem with a building and the year "1941", and the tagline "The Voice for Public Pensions".

Congressional Agenda: Going, Going, Gone?

By Tony Roda

It's too early to say that the Congressional agenda is so gridlocked that nothing of significance will be enacted this year, but the agenda is on the skids and the timetable for action keeps getting pushed back.

Starting with health care or more accurately the “repeal and replace” Obamacare legislation, the House Republicans quickly bogged down. Conservatives within and outside of Congress wanted it to be a true repeal, while moderates wanted to carve a compromise path between repeal and fixing the problems in the underlying law. What transpired illustrated the divisions. With the legislation being considered under the budget reconciliation rules, which requires only a simple majority for passage in the Senate, Democrats would be cut out of the process and were certain to be unified in opposition. The legislation would have to be passed only with Republican votes. That led to a false start in March and then House passage a few weeks later. The cobbled-together, House-passed package is now being completely rewritten in the Senate. All of this is eating up a lot of time on the calendar.

Enter the multitude of investigations on Russia, the firing of FBI Director James Comey, White House staff changes and persistent rumors of more changes in the offing, an anemic pace to fill Executive Branch positions, shifting foreign policy positions, tweets about “covfe,” which allegedly only Trump and one or two other people in the world understand, and we have distractions and diversions unequalled in modern political history.

In this cauldron, the Senate must now find 50 votes (51 would be Vice President Pence) to pass a rewrite of health care law and do so quickly.

Consideration of tax reform is awaiting the enactment of health care legislation. That fact was denied at first, but is now quite apparent. Being able to offset the elimination of the Affordable Care Act's tax provisions – e.g., the surtax on investment income, the Cadillac tax, and the medical device tax -- with cuts to spending, i.e., Medicaid, is critical to being able to consider tax reform with fewer revenue offsets.

The Trump Administration has also set the tax reform effort back by making numerous pronouncements about what should stay in the code and what new proposals, such as Speaker Ryan's border adjustment tax, are unacceptable. This is certainly the Administration's prerogative, but nonetheless it has slowed the process. The goal now is to get the House and Senate Republicans and the White House



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all on the same page before moving to a mark up at the Ways and Means Committee. That's a tall order, but enactment of health care legislation would create some momentum.

The latest fiscal wrinkle, and it's a big one, is that both OMB Director Mick Mulvaney and Treasury Secretary Steve Mnuchin said recently that federal tax dollars are coming in slower than expected and that they would like Congress to increase the debt ceiling before leaving for their August recess. Debt ceiling legislation has devolved into a game of political chicken, with Republicans and Democrats jockeying for leverage, and often intra-party disputes taking center stage. This year's consideration of the debt ceiling will be no different. It, too, will slow the substantive legislative agenda.

What about infrastructure legislation? That should be President Trump's jobs bill, but it appears to be on the back-burner for now. New projects always sound good until the issue of how to pay for them is raised.

Through all this tumult, NCPERS is keeping its eye on the issues that matter for state and local governmental pension plans. Be assured that we will keep you apprised of any developments that warrant your attention. ♦

Tony Roda is a partner at the Washington, D.C. law and lobbying firm *Williams & Jensen*, where he specializes in legislative and regulatory issues affecting state and local pension plans. He represents NCPERS and individual pension plans in California, Ohio, Tennessee and Texas.



2017 Conferences

September

Public Pension Funding Forum

September 10 - 12
Stanford University
Palo Alto, CA

October

NCPERS Accredited Fiduciary Program (NAF)

September 30 - October 1
San Antonio, TX

Public Safety Employees Pension & Benefits Conference

Oct 1 - 4
Hyatt Regency San Antonio
San Antonio, TX

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