



Alameda County Employees' Retirement Association
BOARD OF RETIREMENT

INVESTMENT COMMITTEE/BOARD MEETING

ACERA MISSION:

To provide ACERA members and employers with flexible, cost-effective, participant-oriented benefits through prudent investment management and superior member services.

Wednesday, July 10, 2019
 9:30 a.m.

LOCATION	COMMITTEE MEMBERS	
ACERA C.G. "BUD" QUIST BOARD ROOM 475 14 TH STREET, 10 TH FLOOR OAKLAND, CALIFORNIA 94612-1900 MAIN LINE: 510.628.3000 FAX: 510.268.9574	ELIZABETH ROGERS, CHAIR	ELECTED GENERAL
	TARRELL GAMBLE, VICE CHAIR	APPOINTED
	DALE AMARAL	ELECTED SAFETY
	OPHELIA BASGAL	APPOINTED
	KEITH CARSON	APPOINTED
	JAIME GODFREY	APPOINTED
	LIZ KOPPENHAVER	ELECTED RETIRED
	HENRY LEVY	TREASURER
	GEORGE WOOD	ELECTED GENERAL
	NANCY REILLY	ALTERNATE RETIRED ¹
DARRYL L. WALKER	ALTERNATE SAFETY ²	

Should a quorum of the Board attend this meeting, this meeting shall be deemed a joint meeting of the Board and Committee. The order of agenda items is subject to change without notice. Board and Committee agendas and minutes are available online at www.acera.org.

Note regarding public comments: Public comments are limited to four (4) minutes per person in total.

Note regarding accommodations: The Board of Retirement will provide reasonable accommodations for persons with special needs of accessibility who plan to attend Board meetings. Please contact ACERA at (510) 628-3000 to arrange for accommodation.

¹ Alternate Retired Member (Votes in the absence of the Elected Retired Member, or, if the Elected Retired Member is present, then votes if both Elected General Members, or the Elected Safety Member and an Elected General Member, are absent.

² Alternate Safety Member (Votes in the absence of (1) the Elected Safety, (2) either of the two Elected General Members, or (3) both the Retired and Alternate Retired Members).

INVESTMENT COMMITTEE/BOARD MEETING

NOTICE and AGENDA, Page 2 of 2 – Wednesday, July 10, 2019

Call to Order: 9:30 a.m.

Public Input (Time Limit: 4 minutes per speaker)

Action Items: Matters for discussion and possible motion by the Committee

1. Discussion of and Possible Motion to Recommend to the Board to Adopt Private Credit Investment Policy

9:30 – 10:00 Margaret Jadallah, Verus Advisory Inc.
Faraz Shooshani, Verus Advisory Inc.
Clint Kuboyama, ACERA
Betty Tse, ACERA

2. Discussion of and Possible Motion to Recommend to the Board to Adopt Private Credit Investment Plan

10:00 – 10:30 Margaret Jadallah, Verus Advisory Inc.
Faraz Shooshani, Verus Advisory Inc.
Clint Kuboyama, ACERA
Betty Tse, ACERA

3. Discussion of and Possible Motion to Recommend to the Board to Adopt Private Equity Investment Plan

10:30 – 11:00 Margaret Jadallah, Verus Advisory Inc.
Faraz Shooshani, Verus Advisory Inc.
Clint Kuboyama, ACERA
Betty Tse, ACERA

Information Items: These items are not presented for Committee action but consist of status updates and cyclical reports

1. Review of Trust Company of the West (Traditional Manager – Large Cap Growth)

Craig Blum, Trust Company of the West
Brian McNamara, Trust Company of the West
Margaret Jadallah, Verus Advisory Inc.
Clint Kuboyama, ACERA
Betty Tse, ACERA

Trustee Remarks

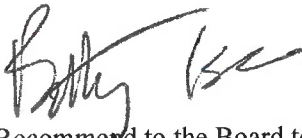
Future Discussion Items

Establishment of Next Meeting Date

August 14, 2019 at 9:30 a.m.



475 14TH STREET, SUITE 1000, OAKLAND, CA 94612 800/838-1932 510/628-3000 FAX: 510-268-9574 WWW.ACERA.ORG

To: Members of the Investment Committee
Date: July 10, 2019
From: Betty Tse, Chief Investment Officer 
Subject: Discussion of and Possible Motion to Recommend to the Board to Adopt Private Credit Investment Policy

RECOMMENDATION:

Recommend to the Board to adopt the proposed Private Credit Investment Policy.

DISCUSSION:

On May 16, 2019, The Board adopted a new asset allocation for ACERA's total Fund. The newly adopted asset allocation includes a 4% target provision to a new asset class, the Private Credit Asset Class. Accordingly, a new proposed investment policy has been created to govern the Private Credit Asset Class. The language in the Private Credit Investment Policy largely mirrors that of the Private Equity Investment Policy (Board approved on September 21, 2017). The most notable language distinctions in the Private Credit Investment Policy have been highlighted in the attached Policy draft and described below:

1. **Types of Private Credit Investments, Section IV, Page 1:** "Private Credit may include, but not be limited to, performing senior corporate loans generally, but not always, secured by first and second liens against assets of the company. Private Credit investments may be denominated in U.S. dollars or other currencies, and levered to provide additional return."
2. **Strategic Objective of Private Credit Portfolio, Section V, Page 2:** "The strategic objective of such investments is to: 1) generate returns superior to those available in the public debt markets to compensate the Fund for the long term and illiquid commitments associated with Private Credit investments; 2) enhance ACERA's long-term risk adjusted return and provide additional diversification to ACERA's overall investment Fund; and 3) generate total Private Credit Portfolio returns approximately 175 basis points over the broadly syndicated U.S. debt investments, as measured by the S&P/LSTA (Loan Syndications and Trading Association) U.S. Leveraged Loan 100 Index, net of all fees and expenses over rolling 3-5 years."
3. **Strategic Allocations to Private Credit Portfolio, Section VI, Page 2:** "The target allocation to the Private Credit asset class, as measured by actual dollars invested and not by dollars committed to underlying Investment Managers or funds, is 4% of the Total Fund, within a range of +/-1% (i.e. between 3% to 5%)". Regarding return expectation, it is stated that, "a diversified Private Credit Portfolio will produce a positive return significantly in excess of publicly traded domestic syndicated leveraged loans". Diversifiable risks are stated as, "credit risk, investment manager risk, the timing of investment cash flows, and fund-level leverage". Target allocation is expected to be reached, "within four years (subject to availability of quality managers)".
4. **Specific Guidelines for Private Credit Portfolio, Section VII, Page 3:** The Private Credit Portfolio will be diversified most notably by, "a minimum of three core investment managers" and by underlying

company such that “exposure to a single company is to be less than 10% of the allocation to the Private Credit Portfolio”.

5. **Delegation, Section VIII-C-4, Page 4:**

“Delegation:

- a. Approving Consultant’s Private Credit investment proposals (new proposals) with each individual commitment up to 20% of the target allocation to the total Private Credit Portfolio or \$50 million (whichever is lesser) upon completion of a thorough review and due diligence process with satisfactory results. Staff and Consultant shall provide the Investment Committee all required reports (please see Appendices I through III).
- b. Approving Consultant’s Private Credit investment proposals for “re-ups” with existing managers with each individual commitment in addition to the existing commitments, up to 25% of the target allocation to the total Private Credit Portfolio or \$75 million (whichever is lesser) to managers in good standing¹ upon completion of a thorough review and due diligence process with satisfactory results. Staff and Consultant shall provide the Investment Committee all required reports (please see Appendices I through III)”.

CONCLUSION:

Considering the purpose of the Private Credit Asset Class within the Total Fund and the Asset Class’ return and risk expectations, Staff agrees with the proposed language in the Private Credit Investment Policy.

The Investment Plan for the Private Credit Asset Class, which outlines the expected construction of the Private Credit Portfolio, is also being presented to the Committee for approval in a separate action item.

Attachment:

- 2019 Private Credit Investment Policy - Proposed

¹ An investment manager may be considered to be in good standing if there is sufficient comfort with factors including, but not limited to, its organization, strategy, performance, and compliance.

**Alameda County Employees'
Retirement Association**

ACERA

PRIVATE CREDIT POLICY

July 10, 2019

ACERA PRIVATE CREDIT POLICY

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I. SCOPE

This Private Credit Policy (“Private Credit Policy” or “Policy”) governs all investments in the Private Credit asset class made by Alameda County Employees’ Retirement Association (“ACERA”). Established on July 10, 2019, the Private Credit Policy is subject to all provisions of applicable law and the applicable limitations and requirements of ACERA’s General Investment Guidelines, Policies and Procedures. If there is any conflict between this Private Credit Policy and ACERA’s General Investment Guidelines, Policies and Procedures pertaining to investments in the Private Credit asset class, the Private Credit Policy prevails. The ACERA Board (“Board”) reserves the right to amend, supplement, or rescind this Private Credit Policy at any time.

II. PURPOSE

The purpose of this Policy is to 1) set forth the private credit policies and guidelines which are deemed to be appropriate and prudent; 2) establish criteria against which private credit investment opportunities are to be measured; and 3) serve as a review document to guide the ongoing oversight of ACERA’s Private Credit Portfolio (“Private Credit Portfolio”) on a consistent basis. The Policy also defines roles and responsibilities of the Board, the ACERA Investment Committee (“Investment Committee”), the ACERA Staff (“Staff”), the ACERA Private Credit Consultant (“Consultant”), and the Private Credit Investment Managers hired by ACERA to manage its assets (“Investment Managers”).

It is expected that this Policy will be a living document and that changes will be made from time-to-time to reflect experience, evolving investment products, and opportunities and changes in the economic and capital market environment.

III. LEGAL AUTHORITY

This Private Credit Policy is established in accordance with Article XVI, Section 17 of the California Constitution and California Government Code sections 31594 and 31595, which establish the exclusive authority and fiduciary responsibility of the Board for the investment and administration of the ACERA Trust Fund (“Fund”).

IV. TYPES OF PRIVATE CREDIT INVESTMENTS

For purpose of this Policy, Private Credit may include, but not be limited to, performing senior corporate loans generally, but not always, secured by first and second liens against assets of the company. Private Credit investments may be denominated in U.S. dollars or other currencies, and levered to provide additional return. ACERA may consider investing in these assets if and only if the vehicles meet all standards pursuant to the Policy.

V. STRATEGIC OBJECTIVE OF THE PRIVATE CREDIT PORTFOLIO

The Board recognizes that when ACERA invests in private investments, the investment performance may be difficult to measure during the first several years of the investments. However, the Private Credit Policy establishes ongoing monitoring and reporting duties for each investment and for the

Private Credit Portfolio as a whole. Specific duties are designed to address these challenges and are described in detail later in this Policy.

The Board believes the Fund's overall returns can be enhanced, on a risk-adjusted basis, by investing a portion of its assets in Private Credit. The strategic objective of such investments is to: 1) generate returns superior to those available in the public debt markets to compensate the Fund for the long term and illiquid commitments associated with Private Credit investments; 2) enhance ACERA's long-term risk adjusted return and provide additional diversification to ACERA's overall investment Fund; and 3) generate total Private Credit Portfolio returns approximately 175 basis points over the broadly syndicated U.S. debt investments, as measured by the S&P/LSTA (Loan Syndications and Trading Association) U.S. Leveraged Loan 100 Index¹, net of all fees and expenses over rolling 3-5 years².

VI. STRATEGIC ALLOCATIONS TO PRIVATE CREDIT PORTFOLIOS

The target allocation to the Private Credit asset class, as measured by actual dollars invested and not by dollars committed to underlying Investment Managers or funds, is 4% of the Total Fund, within a range of +/-1% (i.e. between 3% to 5% of the Total Fund).

Portfolio construction will be designed to produce a diversified mix of returns, subject to the guidelines and constraints outlined herein. While specific investments may incur losses of all or part of the capital invested, it is expected that a diversified Private Credit Portfolio will produce a positive return significantly in excess of publicly traded domestic syndicated leveraged loans.

Diversifiable risks associated with this Portfolio include credit risk, investment manager risk, the timing of investment cash flows, and fund-level leverage. The risks associated with Private Credit investments will be viewed within the context of the entire Fund. ACERA may take on over- and under-weights to the Private Credit asset class to improve its risk/return posture based upon an assessment of the relative attractiveness of all available opportunities. As commitments and investments are expected to be made over time, the Portfolio is expected to reach and maintain its target allocations within 4 years (subject to availability of quality managers).

VII. SPECIFIC GUIDELINES FOR PRIVATE CREDIT PORTFOLIO

ACERA will gain exposure to Private Credit investments by hiring external investment managers directly. Typically, the Fund will subscribe as a limited partner to limited partnership vehicles sponsored by specialty external investment managers.

¹ The S&P/LSTA U.S. Leveraged Loan 100 Index reflects the performance of the largest facilities in the leveraged loan market as covered by the S&P/LSTA Leveraged Loan Index ("LLI"). The LLI captures the market-weighted performance of U.S. dollar-denominated institutional leveraged loan portfolios. The LLI uses real-time market weightings and spreads for the facilities constituting the index. This data is sourced from current investors in these credits. The index uses the Average Bid from LSTA/LPC Mark-to-Market Pricing for its market value return calculations. Criteria for inclusion: U.S. dollar-denominated term loans from syndicated credits that have a minimum initial term of one year, minimum initial spread of LIBOR+125, and minimum initial size of \$50 million. The index primarily consists of senior secured facilities. However, it does include second-lien and unsecured loans if they are broadly held by CLOs and other traditional loan accounts.

² A robust peer-based universe of Private Credit funds covering the target universe does not currently exist. Subject to future review, such peer universe may replace the current Private Credit Portfolio benchmark.

The Private Credit Portfolio is to be diversified over 4 years:

By vintage year: It is expected that roughly equal amounts of new funding will be committed each year, with deviations permitted to adjust for changes in the market value of ACERA's plan, accommodate market opportunities, and to facilitate initial entry into the asset class.

By Investment Manager: The Private Credit portfolio is to be diversified across a minimum of three core investment managers.

By underlying company: Through commitments to funds with diversified portfolios, exposure to a single company is to be less than 10% of the allocation to the Private Credit Portfolio.

By geography: As a fallout of diversified commitments outlined above, it is expected that the Private Credit portfolio will be generally diversified by exposure to companies headquartered across the United States.

By industry: As fallout of diversified commitments outlined above, it is expected that the Private Credit Portfolio will be generally diversified by sector/industry such that no more than 30% of the Private Credit Portfolio exposure will be in be any one sector/industry.

VIII. ROLES AND RESPONSIBILITES

The delineation of roles and responsibilities is important for effective administration of ACERA's Private Credit Portfolio. The duties and responsibilities of the Board, Investment Committee, Staff, Consultant, and Investment Managers are stated below:

A. Board

The Board shall be responsible for approving the Private Credit Policy that governs the Private Credit Portfolio and approving the annual investment plan of ACERA's Private Credit Portfolio. The Board, with input from the Investment Committee, shall review this Policy to determine whether amendments are necessary. The Board shall also be responsible for reviewing and approving all Private Credit investments with individual commitments exceeding Staff's delegated authority as described in subparagraph C below.

B. Investment Committee

The Investment Committee shall be responsible for the following:

1. Establishing the Policy to govern all investments in the Private Credit asset class;
2. Reviewing the Policy, evaluating proposals for the Policy amendments, if any, and making recommendations for approval by the Board;
3. Reviewing and approving the periodic investment plan of the Private Credit Portfolio; and
4. Reviewing Private Credit investments recommended by Staff and/or Consultant and making recommendations to the Board for adoption.

C. Staff

Staff shall be responsible for oversight of ACERA's Private Credit Portfolio. Staff's responsibilities shall include, but not be limited to the following:

1. Developing and recommending all necessary changes to the Policy with input from Consultant;
2. Developing and maintaining specific procedures, if necessary, to comply with the approved Private Credit Policy with input from Consultant;
3. Developing the investment plan of ACERA's Private Credit Portfolio and making recommendations to the Committee for adoption with input from Consultant;
4. Delegation³:
 - a. Approving Consultant's Private Credit investment proposals (new proposals) with each individual commitment up to 20% of the target allocation to the total Private Credit Portfolio or \$50 million (whichever is lesser) upon completion of a thorough review and due diligence process with satisfactory results. Staff and Consultant shall provide the Investment Committee all required reports (*See Appendices I through III*).
 - b. Approving Consultant's Private Credit investment proposals for "re-ups" with existing managers with each individual commitment in addition to the existing commitments, up to 25% of the target allocation to the total Private Credit Portfolio or \$75 million (whichever is lesser) to managers in good standing⁴ upon completion of a thorough review and due diligence process with satisfactory results. Staff and Consultant shall provide the Investment Committee all required reports (*See Appendices I through III*);
5. Through the Investment Products and Services Introduction ("IPSI") program of ACERA and the concurrence of the Consultant, recommend highly qualified Private Credit fund investments to the Investment Committee upon completion of a thorough due diligence process and the requisite reporting listed at Appendix I. (*See Appendices I through III*);
6. Monitoring the Private Credit Portfolio for performance and compliance with the Policy;
7. Monitoring the performance of the underlying Investment Managers and their compliance with a) the investment guidelines as set forth in their respective contracts; b) this Policy; and c) applicable requirements of ACERA's General Investment Guidelines, Policies and Procedures;
8. Conducting comprehensive annual reviews of ACERA's Private Credit Portfolio and the individual investments in the Portfolio;
9. Reporting to the Investment Committee any violations of the Private Credit Policy with appropriate recommendations;
10. Assisting ACERA's legal department in contract negotiations with the selected Investment Managers;
11. Evaluating Private Credit investment opportunities with Consultant's input on an on-going basis; and

³ Investment manager may not appear before the Investment Committee in circumstances when Staff has exercised its delegated authority.

⁴ An investment manager will be considered to be in good standing if there is sufficient comfort with factors including, but not limited to, its organization, strategy, performance, and compliance.

12. Evaluating and making recommendations for retention and termination of Investment Managers.

D. Consultant

The Consultant hired by the Board is a fiduciary to ACERA and its Board. Consultant shall independently and continuously monitor and analyze the performance of ACERA's Private Credit Portfolio and make related recommendations to serve the best interests of the plan participants. Consultant shall assist Staff in developing the Private Credit Policy and recommending all necessary changes to the Policy. In addition, Consultant shall be responsible for:

1. Analyzing the asset allocation of the Private Credit Portfolio by type, implementation vehicle, geography, industry, and vintage year, and making recommendations for reallocation of assets, as appropriate;
2. Developing an investment plan for ACERA's Private Credit Portfolio every 1 to 3 years;
3. Developing a search strategy for highly qualified Private Credit investments and maintaining a robust database containing information on Investment Managers;
4. Recommending highly qualified Private Credit fund investments to Staff and/or the Investment Committee upon completion of a thorough due diligence process and providing the required reports listed in the Appendix I of this Private Credit Policy to Staff and/or the Investment Committee;
5. Ongoing monitoring of the investment performance of ACERA's Private Credit Portfolio and individual investments in the Portfolio;
6. Conducting ongoing due diligence on Investment Managers, notifying ACERA of any significant developments and adverse events and providing analysis and advice on such issues;
7. Ongoing monitoring of Investment Managers' compliance with a) their respective investment guidelines as set forth in their contract; b) this Private Credit Policy; and c) applicable requirements of ACERA's General Investment Guidelines, Policies and Procedures;
8. Assisting Staff in contract negotiations with the selected Investment Managers;
9. Submitting performance evaluation reports and conducting comprehensive reviews of the Private Credit Portfolio and individual Investment Managers semi-annually, and when appropriate, quarterly to the Investment Committee;
10. Making recommendations for retention or termination of Investment Managers;
11. Attending meetings as needed; and
12. Performing other duties in accordance with the terms of its contract and applicable State and Federal law.

E. Investment Managers

Investment Managers are fiduciaries and shall prudently manage ACERA's assets in the best interest of ACERA and its members. Investment Managers shall abide by all applicable policies and procedures established by ACERA, and fully comply with applicable law. Investment Managers shall be responsible for compliance with a) the specific investment guidelines as set forth in their respective contracts; b) the Private Credit Policy; and c) applicable requirements of ACERA's General Investment Guidelines, Policies and Procedures. Investment Managers shall

be responsible for all aspects of portfolio management as set forth in their respective contracts with ACERA. They shall also:

1. Communicate with Staff and/or Consultant promptly regarding investment strategy, investment results, and any non-conforming issues that may have significant and/or negative impact on the portfolio;
2. Cooperate fully with Staff, Consultant, ACERA's custodian, and other ACERA vendors concerning requests for information;
3. Submit reports to Staff and Consultant in accordance with their contract terms; and
4. Attend meetings as needed.

IX. DUE DILIGENCE PROCESS FOR PRIVATE CREDIT SELECTION

ACERA recognizes that a proper due diligence process is essential to control the risks associated with Private Credit investments and, therefore, hereby establishes the following due diligence processes for both its Consultant and Staff:

A. Consultant

Consultant shall conduct extensive, documented due diligence before making any Private Credit investment recommendations to Staff and the Investment Committee. Consultant shall involve Staff in the due diligence process, as necessary. When appropriate, Consultant's duties shall include, but not be limited to:

1. Assessing the reputation of the individuals who manage the Private Credit investments, consider background checks, internet searches, and in-person meetings or conference calls with these individuals, etc.;
2. Conducting on-site visits to the offices of the Investment Managers;
3. Checking references from other investors that have invested in these Private Credit investments, and, when advisable, from competitors;
4. Determining that the Private Credit investment funds are audited, at least annually, by a reputable and recognized external independent auditing firm;
5. Reviewing Investment Managers investment strategies, policies, operating procedures, and historical performance;
6. Reviewing and understanding the valuation procedures employed by the Investment Managers; and
7. Reviewing and understanding the business terms of all operational documents and other related materials for the Private Credit investments under consideration, including but not limited to offering memoranda, subscription agreements, fund policies, due diligence questionnaires, and Forms ADV, if and as available.

B. Staff

Staff shall ensure that Consultant has conducted extensive, documented due diligence on all Private Credit investment proposals recommended to Staff and the Investment Committee. Staff shall participate in Consultant's due diligence process when appropriate and shall also be responsible for:

1. Reviewing the comprehensive analysis report prepared by Consultant on its recommended Private Credit investments;
2. Verifying the compliance of each recommended Private Credit investment with the Private Credit Policy, the investment plan for ACERA's Private Credit Portfolio and other applicable ACERA investment policies;
3. Discussing all issues related to the recommended Private Credit investments with Consultant and with Investment Managers to gain a thorough understanding of each strategy's return drivers, key terms, investment guidelines, and determine the investment suitability for ACERA's Private Credit Portfolio;
4. Performing independent due diligence regarding the business, economic, and legal aspects of the proposed Private Credit investment and in accordance with the Executive Summary (Appendix II) and the Compliance Checklist (Appendix III).
5. Completing Appendices II and III of this document for each investment proposal;
6. Conducting an on-site due diligence visit to each manager's headquarters office whenever possible; and
7. Arranging presentations of select investment opportunities to the Investment Committee, as applicable.

X. SPECIFIC PERFORMANCE EVALUATION CRITERIA

When appropriate, specific performance evaluation criteria, including but not limited to benchmarks, will be established for Investment Managers in their respective contracts with ACERA.

XI. MONITORING AND REPORTING

Consultant and Staff will closely monitor and analyze the Private Credit Portfolio so that the strategic objective of the Portfolio can be met.

Investment Managers shall submit all reports to Staff, Consultant, ACERA's custodian, and other ACERA vendors in accordance with their respective contracts.

Consultant shall submit all reports to Staff in accordance with its contractual obligations and the Private Credit Policy.

Consultant, in conjunction with Staff, shall perform evaluations of ACERA's Private Credit Portfolio and the underlying Investment Managers semi-annually and when appropriate, quarterly. Consultant shall report the findings to Staff and the Investment Committee.

XII. PRIVATE CREDIT INFORMATION DISCLOSURE POLICY

ACERA is a public agency subject to state laws, including, without limitation, (a) the California Public Records Act (Cal. Govt. Code §6250, *et seq.*)(the "Public Records Act"), which provides generally that all records relating to a public agency's business are open to public inspection and copying unless exempted under the Public Records Act, (b) the Ralph M. Brown Act (Cal. Govt. Code § 54950, *et. seq.*)(the "Brown Act"), which provides generally for open meetings for local legislative bodies, and (c) the California Government Code Section 7514.7 ("Cal. Govt. Code § 7514.7") which provides generally that public pension systems in California obtain and publicly disclose certain information regarding fees, expenses and returns from the alternative investment

vehicles in which they invest. *See* Appendix IV for details of the ACERA disclosure policy regarding its Private Credit investments:

XIII. TABLE OF AMENDMENT DATES

No amendments to date.

Appendix I

List of Reports Required for Each Investment Recommendation/Approval

Name of Report	Source
Recommendation/Approval memo	Staff
Recommendation/Approval memo	Consultant
Executive Summary of the Fund	Consultant
Compliance Checklist	Staff
Comprehensive Due Diligence Report (available to Trustees upon request due to confidentiality)	Consultant
Manager Pitchbook	Investment Manager

Note: Staff will provide an abbreviated Executive Summary Report that is available for review upon request by the Trustees.

Appendix II

Executive Summary Report Template

Fund Name

Section I: General Information

Fund Name; Total AUM of the Firm; Current Target Fund Size; Previous Fund Size; Fund Focus; etc.

Section II: Investment Management

Organization Structure; Management Group; Experience; Personnel Turnover; etc.

Section III: Investment Strategy

Investment Philosophy; Investment Strategy; Investment Process; Investment Objective; etc.

Section IV: Risk Management

Risk Control Methodology; Exit Strategy; etc.

Section V: Investment Rationale

Section VI: Investment Concerns

Section VII: Performance (example)

Benchmark:

Returns (%):

Periods Ending Date	YTD	1Year	3Years	5Years	Since Inception
Fund					
Benchmark					
Relative Performance: Account – Benchmark					

Section VIII: Key Terms

Fund Term; Preferred Return; Investment Period; Management Fee; Other Fees; General Partner Carry; GP Commitment; Advisory Board; Clawback; No-Fault Divorce; Key-Person Events; Closing Schedule; Drawdown Schedule; etc.

* List of items to be addressed as appropriate.
Data provided by Name as of Date; ICM Date

Appendix III

Compliance Checklist Template for Private Credit Investment Selection

Target allocation to Private Credit asset class: 4% of the total Fund

A. Private Credit Policy

Fund Name

In Compliance

1. Permissible Legal Structures

Any legally permissible vehicle will be allowed including, but not limited to, joint ventures, limited partnerships, and limited liability corporations.	<i>Specific legal structure.</i>	<i>Yes, No or N/A</i>
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2. Investment Methods

Individual limited partnership funds Primary and/or Secondary Separate accounts Discretionary Fund-of-funds Direct investments/Co-Investments Combination of the above	<i>Specific investment methods.</i>	<i>Yes, No or N/A</i>
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3. Investment Characteristics

Private Credit may include performing senior corporate loans generally secured by first and second liens against assets of the company.	<i>Specific investment type.</i>	<i>Yes, No or N/A</i>
Private Credit may be denominated in U.S. dollars or other currencies.	<i>Specific investment characteristics.</i> <i>Specific currency denomination.</i>	<i>Yes, No or N/A</i> <i>Yes, No or N/A</i>

4. Portfolio Diversification

<u>By vintage year</u> : roughly equal amounts of new funding will be committed each year, with deviations permitted.	<i>Specific vintage year.</i>	<i>Yes, No or N/A</i>
<u>By Investment Manager</u> : diversified across a minimum of three core investment managers.	<i>Specific commitments to the Investment Manager.</i>	<i>Yes, No or N/A</i>
<u>By company</u> : a single company is to be less than 10% of the allocation to the Private Credit Portfolio.	<i>Portfolio diversification.</i>	<i>Yes, No or N/A</i>
<u>By geography</u> : commitments to funds	<i>Specific location.</i>	<i>Yes, No or N/A</i>

investing both in and outside of the U.S. <u>By industry:</u> generally diversified by sector/industry such that no more than 30% of the Private Credit Portfolio exposure will be in be any one sector/industry.	<i>Specific sector/industry.</i>	<i>Yes, No or N/A</i>
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5. Return Expectation

S&P/LSTA U.S. Leveraged Loan + 175 bps (net of all fees) in aggregate.	<i>Specific return target.</i>	<i>Yes, No, or N/A</i>
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B. Private Credit Investment Plan for YEAR

Approved: DATE

Fund Name

In Compliance

Specific Investment Plan	<i>Specific commitment to the Investment Manager.</i>	<i>Yes, No, or N/A</i>
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APPENDIX IV

Details of Disclosure Policy For Private Credit Investments (“PCI”)

1. Upon request, ACERA shall disclose : (i) the name, address and vintage year of each PCI; (ii) the dollar amount of capital committed to each PCI by ACERA since inception; (iii) the dollar amount of cash contributions made to each PCI by ACERA since inception; (iv) the dollar amount of distributions received by ACERA from each PCI on a fiscal yearend basis; (v) the market value of ACERA’s investment in each PCI on a fiscal yearend basis; (vi) each PCI’s net internal rate of return (“IRR”) since inception; (vii) the investment multiple of each PCI since inception; (viii) the dollar amount of total management fees and expenses paid on an annual fiscal yearend basis, by ACERA to each PCI; and (ix) the dollar amount of cash profit received by ACERA from each PCI Fund on a fiscal yearend basis. (*See* Cal. Govt. Code § 6254.26(b).)

2. ACERA shall disclose at least once annually in a report presented at a meeting open to the public : (i) the fees and expenses that ACERA pays directly to the PCI, the PCI manager or related parties; (ii) ACERA’s pro rata share of fees and expenses not included in (i) that are paid from the PCI to the PCI manager or related parties; (iii) ACERA’s pro rata share of carried interest distributed by the PCI to the PCI manager or related parties; (iv) ACERA’s pro rata share of aggregate fees and expenses paid by all of the portfolio companies held by the PCI to the PCI manager or related parties; (v) the information outlined in Section 1, above, and (vi) the gross and net IRR of the PCI, since inception. (*See* Cal. Govt. Code § 7514.7)

All other records regarding such Private Credit investments shall be exempt from disclosure to the fullest extent permitted under applicable law.

Notwithstanding the preceding, or anything else in this Private Credit Policy, ACERA reserves the right to withhold any record when “on the facts of the particular case the public interest served by not disclosing the record clearly outweighs the public interest served by disclosure of the record.” (*See*, Cal. Govt. Code §6255(a)). This weighing process contemplates a case-by-case balancing test between competing public interests based on the facts presented as the statute has been interpreted by the courts.⁵

⁵ *Michaelis, Montanari & Johnson v Superior Court*, 38 Cal.4th 1065, 1071 (2006).



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



JULY 2019

Private Credit Investment Plan: 2019-2022

ACERA

Private Credit Investment Plan Overview

- Plan to implement new asset allocation (approved 2019)
- Proposed plan based on:
 - Plan value: \$8.17 billion (March 31, 2019)
 - Long-term investment return assumption: 6.7% per year
 - Plan Contributions / Distributions (source: Segal actuarial, December 31, 2017)
 - Blend of levered and unlevered private credit funds
- Achieve target allocation:
 - Private Credit: 4% by 2023

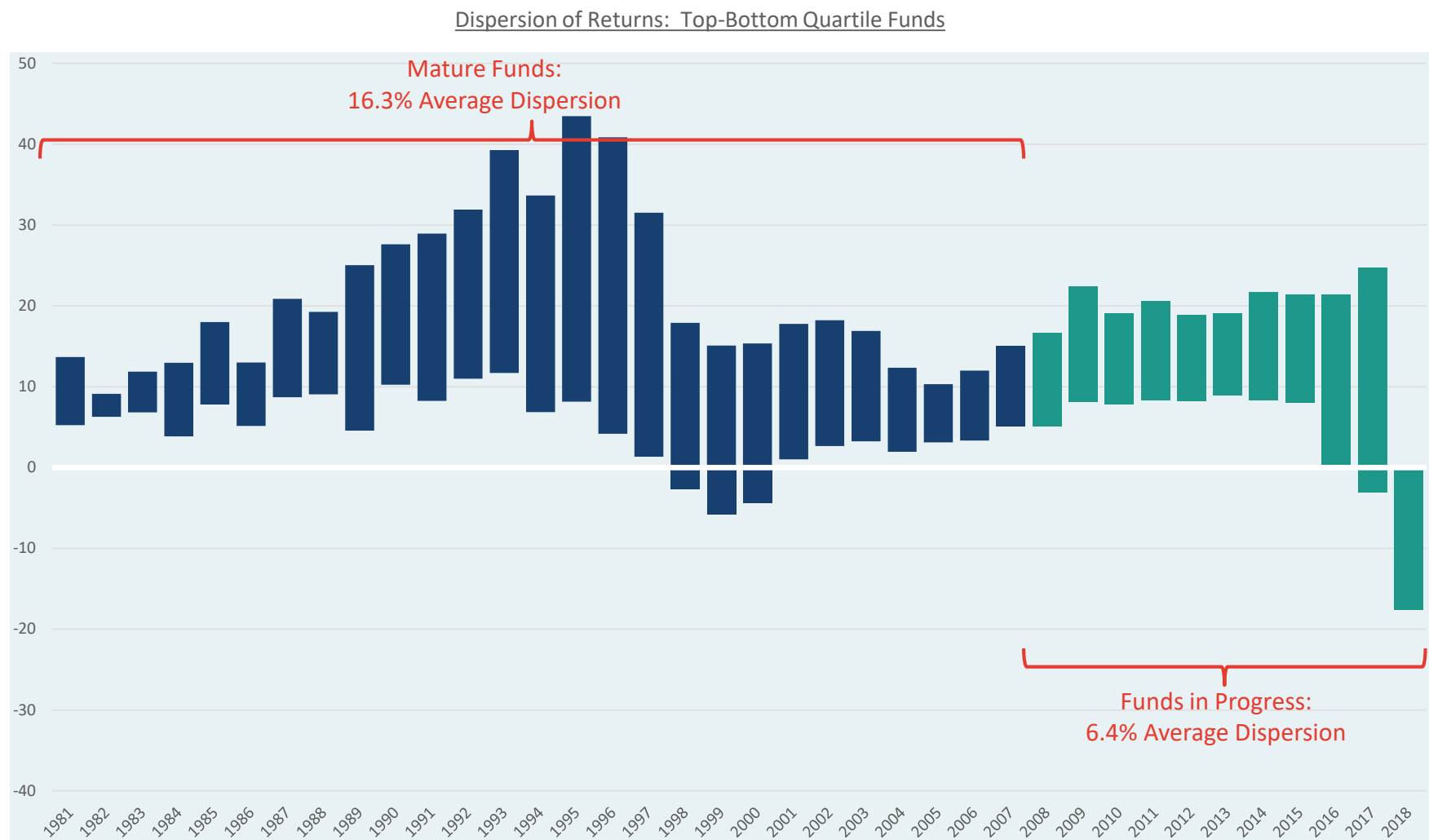
Private Credit Investment Plan: 2019-2022

New Commitments Required to Achieve Target Allocations / Diversification*

Private Credit: 7 new funds \$490 million

*All projected commitments (number and size)
subject to bottom-up evaluation of GPs and market opportunities.

Manager selection is critical to results



Source: Thomson Reuters C|A U.S. All Private Equity returns, as of December 31, 2018. For illustrative purposes only as dispersion of returns varies by sub-asset class.

Investment Plan – as of June 30, 2019

	2019 Projected	2020 Projected	2021 Projected	2022 Projected	2023 Projected	2024 Projected	2025 Projected	2026 Projected	2027 Projected	2028 Projected
Annual Commitments (\$M)										
Private Credit	\$ 100.0	\$ 130.0	\$ 130.0	\$ 130.0	\$ 130.0	\$ 120.0	\$ 120.0	\$ 120.0	\$ 150.0	\$ 150.0
Total Private Credit	\$ 100.0	\$ 130.0	\$ 130.0	\$ 130.0	\$ 130.0	\$ 120.0	\$ 120.0	\$ 120.0	\$ 150.0	\$ 150.0
Number of Commitments										
Private Credit	1	2	2	2	2	2	2	2	2	2
Total Private Equity (ex-duplicates)	1	2	2	2	2	2	2	2	2	2
Exposures										
Private Credit as a % of Plan (Target 4.0%)	0.3%	1.1%	2.2%	3.2%	4.0%	4.4%	4.5%	4.4%	4.2%	4.1%



**PERSPECTIVES
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SUCCESS**



JULY 2019

Private Equity Investment Plan: 2019-2021

ACERA

Private Equity Investment Plan Overview

- Plan update per new asset allocation (approved 2019)
- Proposed Updates:
 - Plan value: \$8.17 billion (March 31, 2019)
 - Long-term investment return assumption: 6.7% per year
 - Plan Contributions / Distributions (source: Segal actuarial, December 31, 2017)
 - Cash flows and valuations of existing funds
- Achieve target allocation:
 - Private Equity: 8% by 2022
 - Overweight Buyout (65% vs. 60% neutral target) and Venture Capital (22% vs. 20% neutral target)
 - Underweight Debt/Special Situations (12% vs. 20% neutral target)

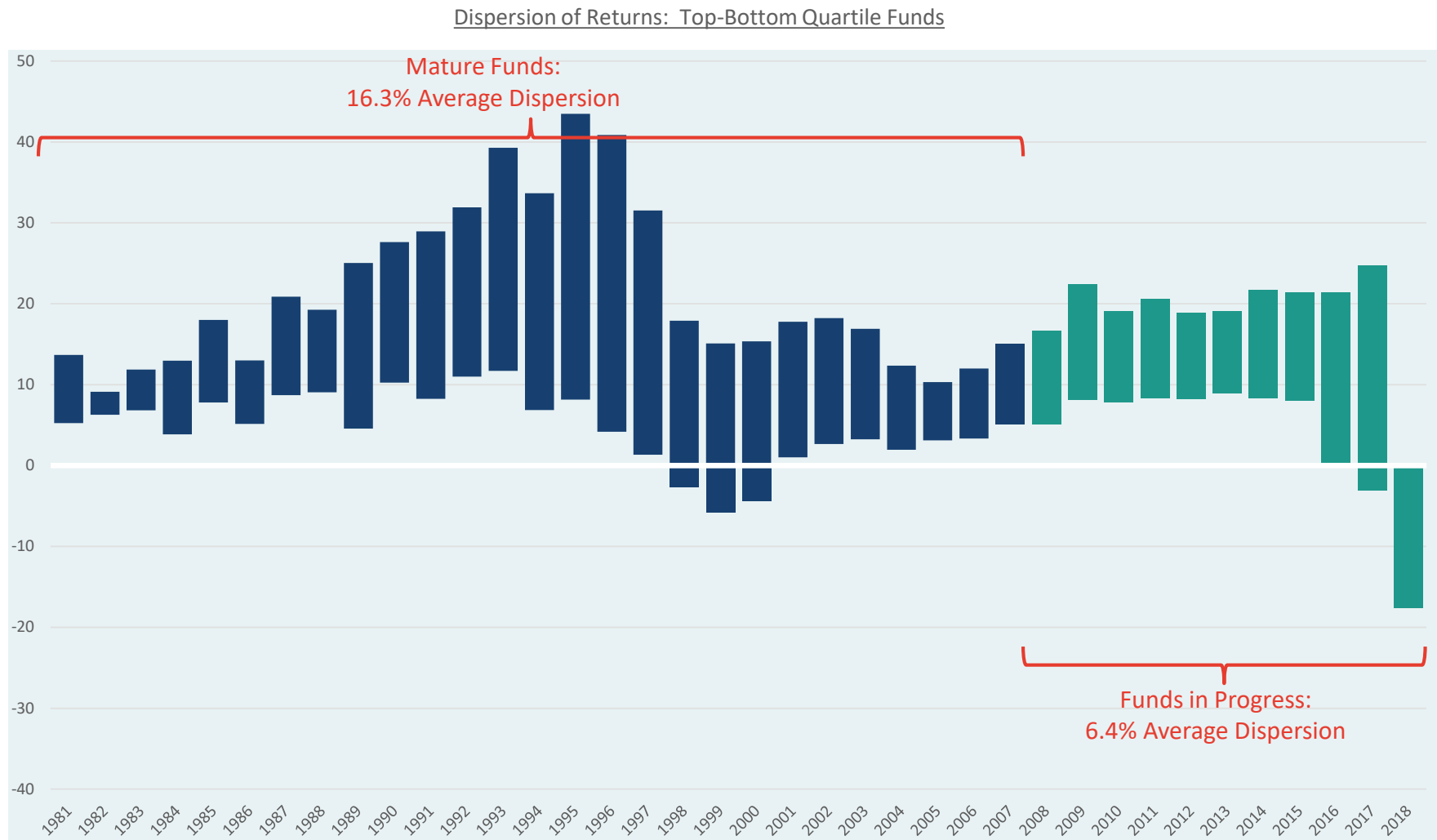
Private Equity Investment Plan: 2019-2021

New Commitments Required to Achieve Target Allocations / Diversification*

Buyout:	3-4 new funds	\$125 million
Venture Capital:	5-7 new funds	\$95 million
Debt/Spec. Sits:	1-2 new funds	\$40 million

*All projected commitments (number and size)
subject to bottom-up evaluation of GPs and market opportunities.

Manager selection is critical to results



Source: Thomson Reuters C|A U.S. All Private Equity returns, as of December 31, 2018. For illustrative purposes only as dispersion of returns varies by sub-asset class.

Investment Plan – as of June 30, 2019

	2017 Actual	2018 Actual	2019 Projected	2020 Projected	2021 Projected	2022 Projected	2023 Projected	2024 Projected	2025 Projected	2026 Projected	2027 Projected	2028 Projected	2029 Projected
Annual Commitments (\$M)													
Venture Capital	\$ 35	\$ 10	\$ 50	\$ 35	\$ 35	\$ 35	\$ 35	\$ 35	\$ 35	\$ 40	\$ 40	\$ 40	\$ 40
Buyouts	\$ 65	\$ 88	\$ 152	\$ 50	\$ 75	\$ 80	\$ 80	\$ 80	\$ 120	\$ 140	\$ 140	\$ 140	\$ 140
Debt-Related/Special Situations	\$ 100	\$ -	\$ 33	\$ 20	\$ 20	\$ 20	\$ 35	\$ 35	\$ 75	\$ 75	\$ 75	\$ 40	\$ 40
Total Private Equity	\$ 200	\$ 98	\$ 235	\$ 105	\$ 130	\$ 135	\$ 150	\$ 150	\$ 230	\$ 255	\$ 255	\$ 220	\$ 220

Number of Commitments

Venture Capital	2	2	2	2-3	2-3	2-3	2	2	2	2-3	2-3	2-3	2-3
Buyouts	2	2	5	1-2	2	2	2	2	3	3	3	3	3
Debt-Related/Special Situations	4	0	1	0-1	0-1	1	1	1	2	2	2	1	1
Total Private Equity	8	4	8	3-6	4-6	5-6	5	5	7	7-8	7-8	6-7	6-7

Exposures

Private Equity Exposure as a % of Plan (Target 8%; Range 5-10%)	5.7%	6.8%	6.7%	7.2%	7.7%	8.1%	8.2%	8.4%	8.0%	7.8%	8.1%	8.0%	8.2%
VC % of Total Private Equity (Target 20% / Range 0-40%)	34.1%	32.9%	31.9%	26.9%	24.5%	22.2%	21.9%	22.6%	22.3%	23.2%	22.6%	20.9%	19.8%
Buyouts % of Total Private Equity (Target 60% / Range 30-80%)	54.6%	57.3%	56.8%	59.5%	62.3%	65.4%	66.4%	66.2%	64.8%	61.1%	58.7%	58.5%	60.0%
Debt/Special Situations % of Total Private Equity (Target 20% / Range 0-70%)	11.2%	9.8%	11.3%	13.7%	13.2%	12.4%	11.7%	11.2%	12.9%	15.7%	18.6%	20.6%	20.2%



To: Members of the Investment Committee
From: Betty Tse, Chief Investment Officer
Thomas Taylor, Investment Officer
Date: July 10, 2019
Subject: Review of Large Cap Growth Manager – Trust Company of the West

Recommendation:

This is an information item only.

Background:

The U.S. Equity - Large Cap Growth account managed by Trust Company of the West was last reviewed at the January 13, 2016 Investment Committee Meeting. At that meeting, Craig Blum, the portfolio manager, discussed how he thought the relative performance would improve once the Federal Reserve's quantitative easing program ended and no longer prop up the entire equity market. At that time, TCW was out performing the benchmark (R1G+200) by 5.34% for 1-year trailing, and by 75 basis points since inception. Subsequent to the last review, the benchmark has been amended to the Russell 1000 Growth (no adder) on September 20, 2018.

Discussion and Manager Review:

Mandate: A highly-focused approach primarily targeting top mid- to large-cap companies with strong and enduring business models. An active strategy utilizing proprietary fundamental research focused on identifying companies with improving operating prospects. The portfolio in TCW Concentrated Core seeks to maximize total return, with an emphasis on capital appreciation. TCW believes strong long-term performance can be achieved by participating in the long-term success of selected businesses purchased at attractive valuations.

Organization: The strategy's team is led by Craig Blum, CFA and consists of Brian McNamara, Brandon Bond, and Robert Park. There have been no departures to report at the organization since the last review.

Performance:

The account has produced excess returns of 4.59% on a 1-year trailing period (3/31/19); 2.88% excess returns for 2-years trailing; and 1.03% excess returns 3-year trailing. (Please see Executive Summary.)

In review of TCW's performance, Staff has considered many other factors including: attribution, tracking errors and information ratio. Attribution reveals TCW has done well both in industry

selection and stock selection. For example, the strategy has been over weighted in Financials, Information Technology, and Real Estate with additive returns from stock selection in 7 of the 11 sectors (e.g., Information Technology, Consumer Staples, and Healthcare).

Conclusion:

Active management -though reduced through recent manager structure changes (80% passive), is an important component of ACERA meeting its performance objectives. Though TCW was paired with the large cap value manager at the time of hire (1999), TCW has exhibited favorable excess returns over the short, intermediate and long-term periods of time. Staff is comfortable to retain this manager; however, would like to bring back an action item to search (focus search) for the large cap value manager to better “pair” in the next couple of months for the Committee to consider.

Attachments:

1. Executive Summary
2. Style Advisor
3. Trading Cost Analysis
4. Verus Memo



Executive Summary

Trust Company of the West

Investment Strategy: The investment philosophy underlying the TCW Concentrated Core Equities strategy is a highly focused approach. The strategy seeks to achieve superior long-term returns by owning high-quality companies with opportunities for growth which are not fully reflected in stock market valuations. Investments are made in companies with successful business strategies for growth and significantly improving business fundamentals. Their investment research is designed to identify companies with potential for improvement in profitability, acceleration of growth, and broadening industry position.

Inception Date with ACERA:	6/4/99
Total Assets Managed:	\$200 billion (firm-wide)
Total Assets Managed in Product:	\$1.87 billion (institutional clients only as of 3/31/2019)
Total Clients in Product:	31 (institutional clients as of 3/31/2019)
ACERA Assets Being Managed:	\$173.88 million (as of 3/31/2019)
Percentage of ACERA's Total Fund¹:	2.13% (as of 3/31/2019)
Account Benchmark:	Russell 1000 Growth

Annualized Returns (%):

Annualized Returns for Periods Ending March 31, 2019 (not annualized if less than 1 year)	Year to Date	1 Year	3 Years	5 Years	10 Years	Since Inception
Trust Company of the West (Gross Returns)	19.40	17.59	17.97	13.19	17.35	7.80
Trust Company of the West (Net Returns)	19.28	17.12	17.58	12.84	16.98	7.37
Index (Russell 1000 Growth)	16.10	12.75	16.53	13.50	17.52	5.57
Relative Performance (Net)	3.18	4.37	1.05	-0.66	-0.54	1.80

Portfolio Characteristics:

	<u>Portfolio</u>	<u>Benchmark</u>
Number of Holdings	31	545
Percentage of Top Ten Holdings	50.74%	33.95%
Annual Turnover	9.14%	N/A
Weighted Average Market Cap	\$209.76 B	\$289.95 B
P/E Ratio	29.2x	20.4x
P/B Ratio	7.1x	7.4x

Actual Management Fees for 2018: \$963,267 (35 bps)

Management Fees 1Q 2019: \$175,117 (41 bps)

Manager Style: Large Cap Growth

Compliance: In compliance with ACERA's reporting requirements.

Turnover in Key Personnel (portfolio manager)

Since Last Annual Review: None

Names of Portfolio Manager: Craig Blum

¹ Total Fund as of 3/31/2019: \$8,168,347,056 (Source: Verus Advisory, 1Q2019 IPR)
Information compiled by the Investment Manager and Staff.
ICM 7/10/2019

Trust Company of the West Trading Cost Analysis

ACERA has contracted with Zeno Consulting Group (Zeno) to perform the trading cost analyses since 1Q98. ACERA has also contracted with Zeno to monitor and analyze the efficiency of ACERA's DB program since September 2006.

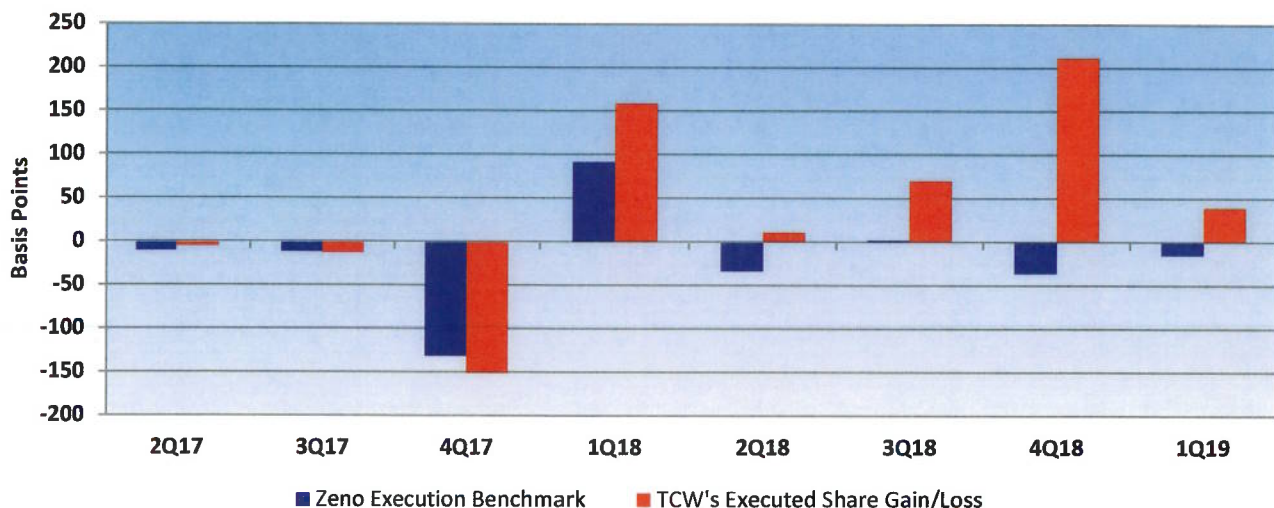
Zeno Methodology: Trades executed in the same stock, on the same side (Buy or Sell) and within five trading days of the previous trade, are grouped into the same Decision/Order. For each group of trades, Decision/Order prices are set to the opening price of the stock on the day of the first trade. For example, assume a manager's "Decision" to trade was made at the Market's close on Oct. 20th. The stock's opening price on Oct. 21st becomes the Decision/Order price against which all trade prices in each group are compared. Since either gains or losses can accrue to the funds assets through the process of trading stocks, Zeno nomenclature identifies "total costs" as "Executed Share Gain/Loss."

Executed Share Gain/Loss:	Commission + Market Impact + Delays
Zeno Execution Benchmark:	Zeno Average Execution Gain/Loss based on the average cost for all managers in the Zeno Database trading similar stocks in similar size and market conditions (risk adjusted)
Commission:	Cost of transacting with a broker
Market Impact:	Each day's trading cost (opening price minus trade price)
Delays:	The costs of trading decisions over several days (decision price minus days opening price)

Trading Discipline: If prices are favorable (i.e. falling for buys, rising for sells) a positive Executed Share Gain/Loss number will accrue for the fund if delays occur while trading. If prices are adverse (i.e. rising for buys, falling for sells), a negative Executed Share Gain/Loss number will be incurred by the fund if delays occur while trading. Many growth/momentum managers incur execution losses, since they usually purchase and liquidate stocks with adverse prices (growth stocks also tend to be momentum stocks).

TCW Execution Gain/Loss vs. Zeno Execution Benchmark:

	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19
Zeno Execution Benchmark	-10	-11	-131	92	-33	2	-36	-15
TCW's Executed Share Gain/Loss	-4	-12	-150	159	11	70	211	39
Value Added/Lost by TCW	6	-1	-19	67	44	68	247	54

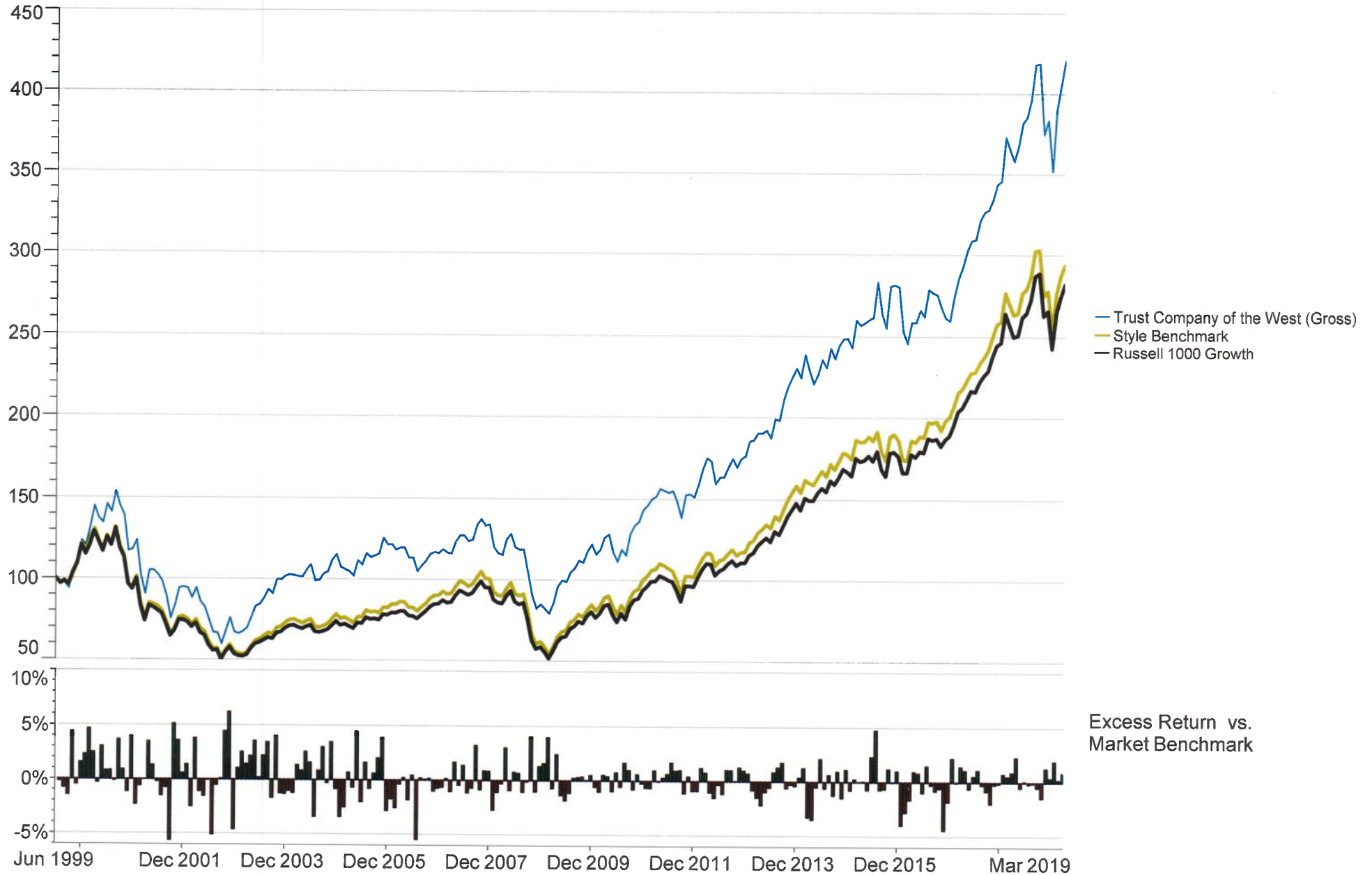


Summary:

TCW has routinely incurred lower aggregate execution costs and greater execution efficiency relative to its benchmark, which has added value to ACERA's portfolio in six of the last eight quarters (ended 1Q19). The total dollar value added by TCW over that time period was approximately \$315.8 million.

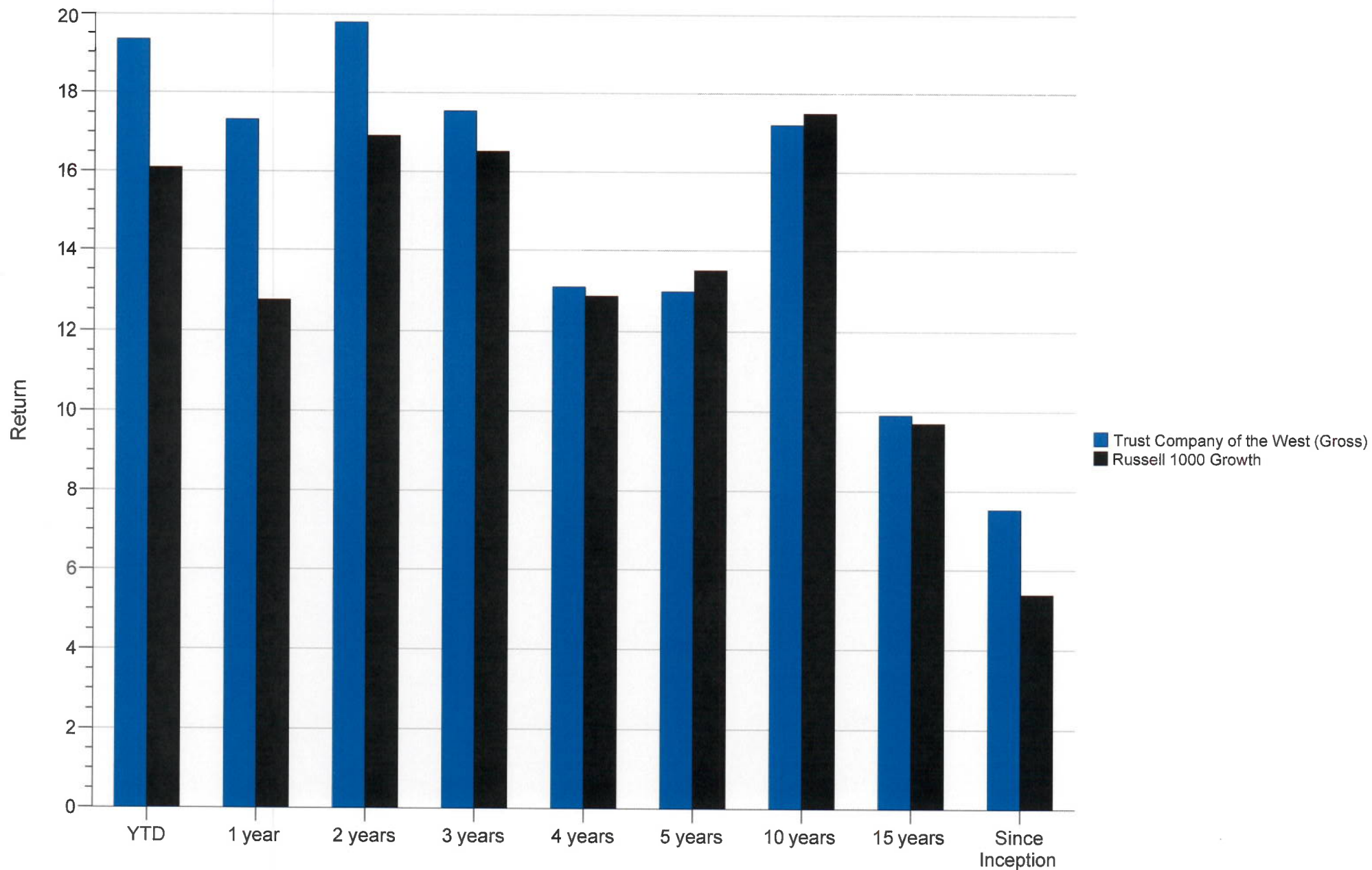
Manager Performance

July 1999 - March 2019 (Single Computation)



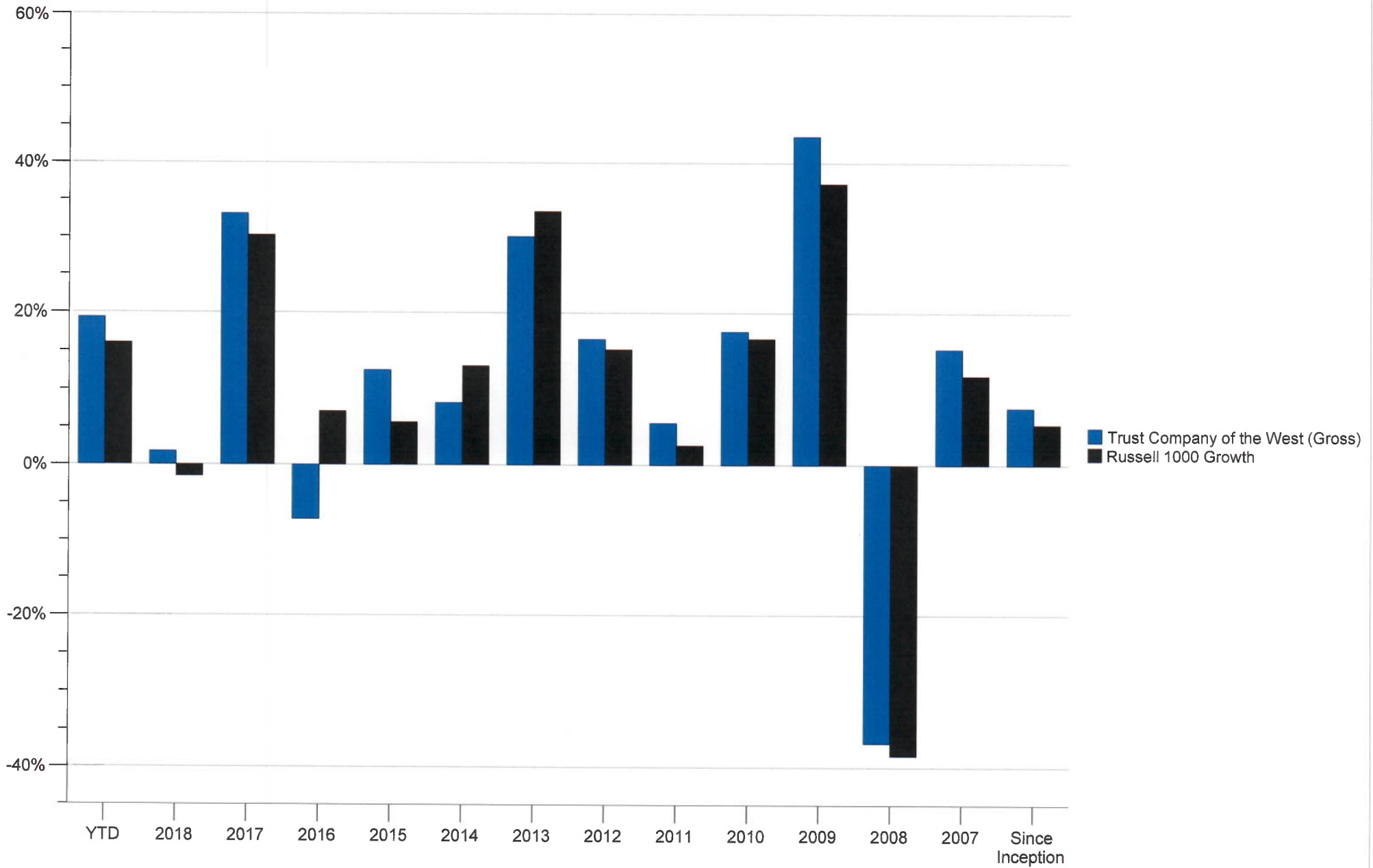
Manager vs Benchmark: Return

July 1999 - March 2019 (not annualized if less than 1 year)



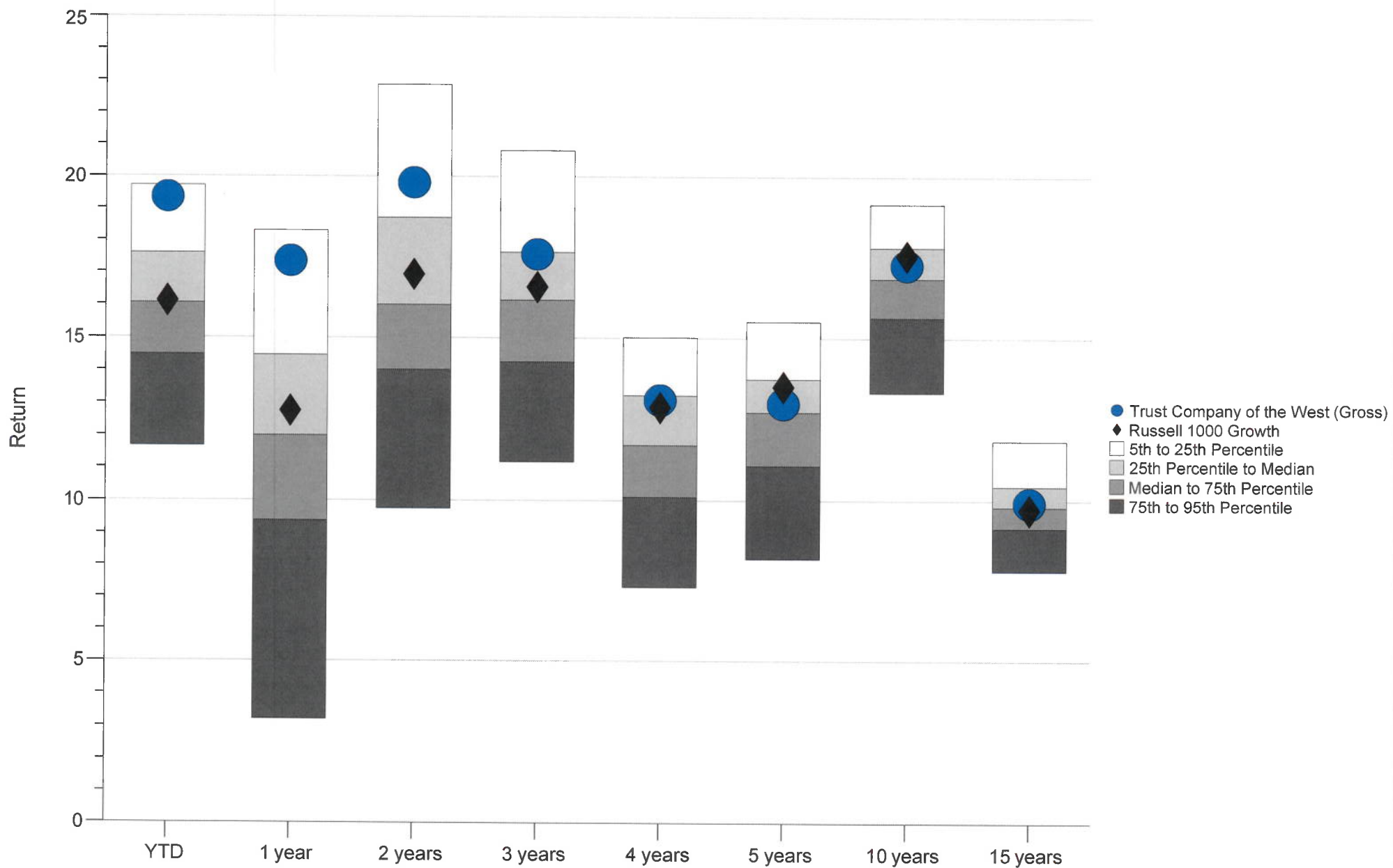
Calendar Year Return

As of March 2019



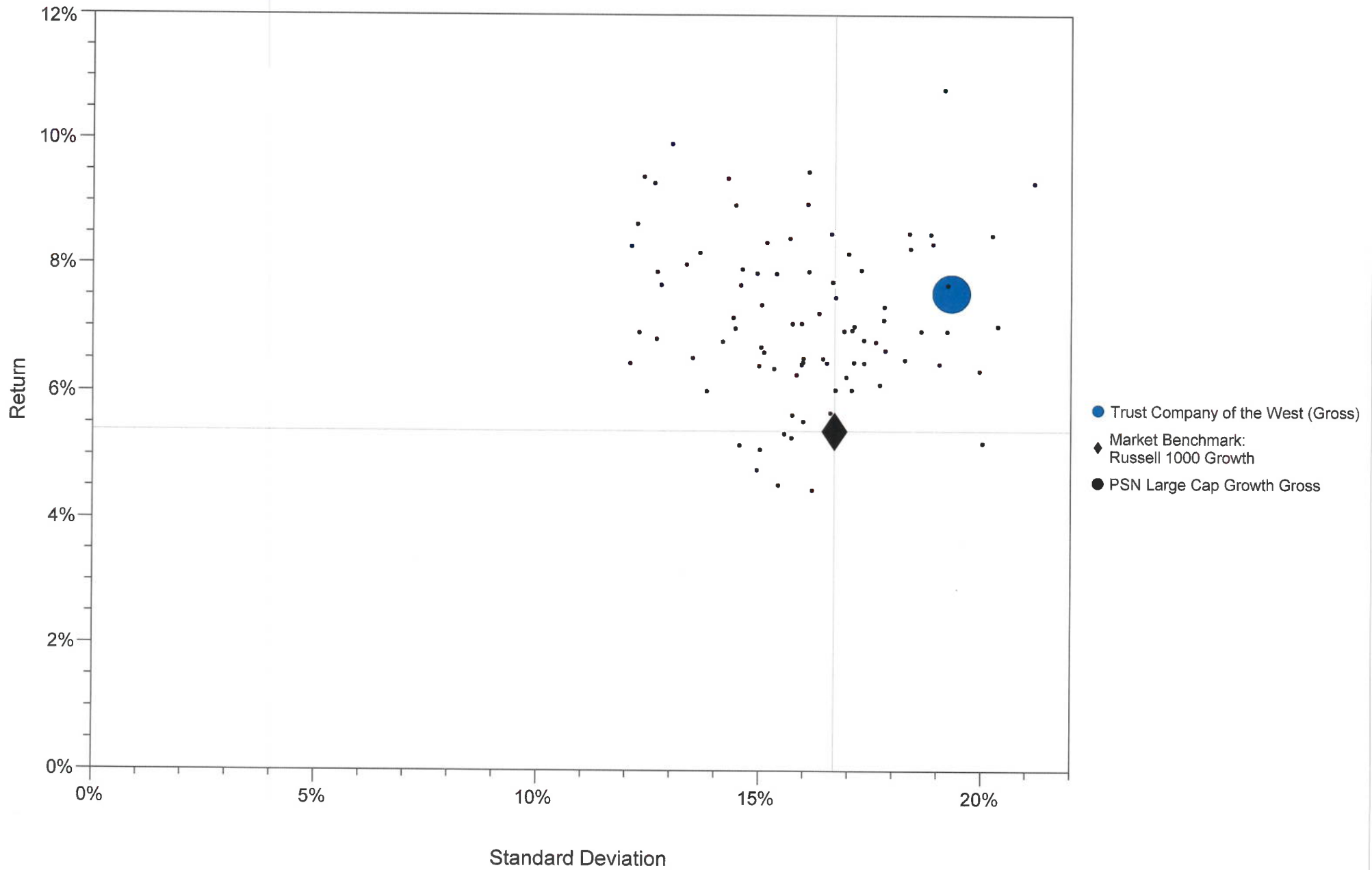
Manager vs PSN Large Cap Growth Gross: Return

July 1999 - March 2019 (not annualized if less than 1 year)



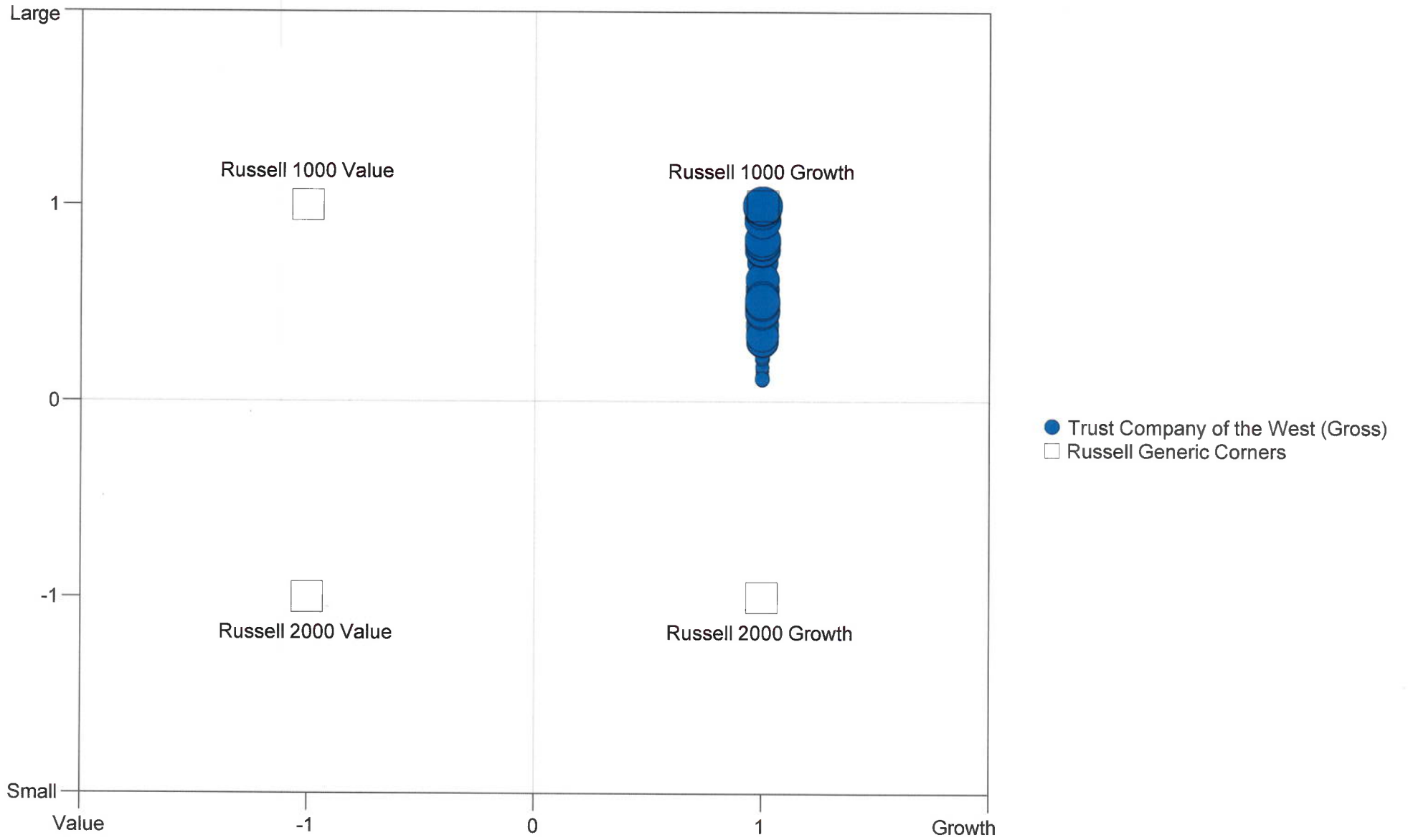
Risk / Return

July 1999 - March 2019 (Single Computation)



Manager Style

July 1999 - March 2019 (36-Month Moving Windows, Computed Monthly)



Scaled Style Coordinates

TCW Concentrated Core

ONE-ON-ONE STRATEGY PRESENTATION | FIRST QUARTER 2019

PRESENTATION TO:

Alameda County Employees' Retirement Association

JULY 10, 2019

Presented by:

Craig C. Blum, CFA | Portfolio Manager | Group Managing Director | Equities

Brian M. McNamara | Managing Director | Analyst and Portfolio Specialist | Equities

Table of Contents

- I. TCW Overview
- II. TCW Concentrated Core Team
- III. Investment Philosophy and Process
- IV. Portfolio Characteristics
- V. Performance
- VI. Performance Review
- VII. Appendix:
 - Quarterly Review
 - Biographies
 - Disclosure



I. TCW Overview

TCW Overview

AS OF MARCH 31, 2019

Distinguishing Features:

- Among leading global asset management firms with nearly five decades of investment experience
- Disciplined, team-managed investment processes that have been tested across market cycles
- Broad range of products and expertise across fixed income, equities, emerging markets, and alternative investments
- TCW is a signatory to the UN Principles for Responsible Investment
- High level of employee ownership of TCW
- For the fifth year in a row, TCW named “Best Places to Work in Money Management among firms with 500-999 employees” by *Pensions & Investments*, 2014, 2015, 2016, 2017, and 2018

Firm Facts:

- Established in 1971 in Los Angeles, California
- \$200 billion under management
- Through our TCW and MetWest Fund Families, TCW manages one of the largest mutual fund complexes in the U.S. with approximately \$94 billion in assets under management
- TCW staff of more than 600 individuals
- Offices in Los Angeles, New York, Boston, Chicago, London, Milan, Hong Kong, and Tokyo



Source: TCW

Comprises the assets under management, or committed to management, of The TCW Group, Inc. and its subsidiaries.

TCW Investment Professionals and Tenure

AS OF MARCH 31, 2019

(In \$ Billions)	Fixed Income	Equities	Alternative Investments	Total
Assets Under Management	\$181	\$13	\$6	\$200
Portfolio Managers	13	8	1	22
Analysts	49	23	2	74
Traders	15	6	–	21
Portfolio Manager/Analyst/Trader*	–	–	19	19
Product/Portfolio Specialist	8	3	–	11
Portfolio Analytics**	–	–	–	9
Total Investment Professionals	85	40	22	156

- Significant pool of investment professionals
- Portfolio managers average 25 years of experience with approximately 15 years of tenure at TCW
- Deep pool of analysts and investment resources across products

Source: TCW

* The TCW Direct Lending team shares these responsibilities.

** Portfolio Analytics responsibilities cover all asset classes.

Note: Totals may not reconcile due to rounding.

Comprises the assets under management as of March 31, 2019, or committed to management, of The TCW Group, Inc. and its subsidiaries.

TCW Partial Client List

AS OF MARCH 31, 2019

Corporations

ArcelorMittal Steel USA, Inc.
AT&T Inc.
BAE Systems North America
Ball Corporation
Hallmark Cards, Inc.
Navy Federal Credit Union
Nissan North America, Inc.
Sanofi-Aventis
Smart & Final
Union Bank
Verizon Investment Management Corporation

Multiple-Employer/Unions

Boilermaker-Blacksmith National Pension Trust
Media Guild Retirement Plan
New Jersey Transit
Painting Industry of Hawaii Annuity Fund
Producer-Writers Guild of America Pension Plan
San Diego County Construction Laborers
Screen Actors Guild - Producers Pension Plan
Sheet Metal Workers' National Pension Fund
Teamsters Negotiated Pension Plan

Foundations, Universities and Not-For-Profit Organizations

California State University Risk Management Authority
Catholic Relief Services
Father Flanagan's Trust Fund
The Archdiocese of San Francisco
U.S. Conference of Catholic Bishops

Public Funds

Alameda County Employees' Retirement Association
City of Tallahassee Pension Plan
County of Los Angeles Savings Plan
Illinois State Universities Retirement System
Oklahoma Law Enforcement Retirement System
Oklahoma Public Employees' Retirement System
Public School Retirement System of St. Louis
Sacramento County Employees' Retirement System
Sacramento Regional Transit District
San Diego City Employees' Retirement System
State of Michigan Retirement System
State of Wisconsin Investment Board
Tacoma Employees' Retirement System
Tennessee Valley Retirement System
Westmoreland County Employees' Retirement System

Healthcare

Bishop Clarkson Memorial Foundation
Blue Cross and Blue Shield of Kansas City
Cedars-Sinai Medical Center
Mayo Clinic
Medica
Methodist Le Bonheur Healthcare

Insurance

Argo Group Limited
McDonald's Owner/Operator Ins. Co. Ltd
National Home Insurance Company
Reinsurance Group of America, Inc. (RGA)
Sompo Japan Nipponkoa Insurance

Subadvisory Relationships/ Program Sponsors

Subadvisory Relationships

Amundi
Brighthouse Financial
Morgan Stanley Pathway Funds – Core Fixed Income Fund
Columbia Management
Daiwa Securities
FundLogic Alternatives
Liberty All-Star® Funds
Mitsubishi UFJ Trust and Banking Corporation
Russell Investment Group
SEI
Sompo Japan Nipponkoa Asset Management

Program Sponsors

J.P. Morgan Securities LLC*
Fidelity FundsNetwork®**

* Sponsor of an advisory program in which TCW participates as an advisor

** Fidelity, Fidelity Investments, and FundsNetwork are registered service marks of FMR LLC.

The clients listed have a minimum of \$10mm AUM with TCW, are invested in one or more investment strategies and are selected based on inclusion in the Money Market Directory or written consent by the client. Subadvisory relationships and Program Sponsors are listed with their express written consent. Inclusion on this list should not be considered an endorsement of the investment advisor or services rendered. It is not known whether the listed clients approve or disapprove of TCW or the advisory services provided.

II. TCW Concentrated Core Team

TCW Investment Team and Resources

INVESTMENT TEAM



Brandon D. Bond, CFA
Managing Director
Senior Analyst



Craig C. Blum, CFA
Group Managing Director
Portfolio Manager



Brian M. McNamara
Managing Director
Analyst, Portfolio Specialist



Robert J. Park, CFA
Managing Director
Senior Analyst

Over 88 Years of Combined
Investment Experience

TCW
Shareholders

TCW Select Equities Fund
Shareholders

RESOURCES

TCW Equity Research

Analysts provide coverage
of all major economic sectors

Approximately 150 years of
combined investment experience

Third Party
Research

TCW Equity & Fixed Income
Product Teams

TCW Portfolio
Analytics Group

TCW Equity Research



MICHAEL REILLY, CFA

Chief Investment Officer – Equities
Director of Equity Research

Industry Experience

31 years | TCW 27 years

Education

University of Southern California

- BS in Finance
- BA in Spanish

University of Southern California, Marshall School of Business

- MBA in Finance



JASON MAXWELL, CFA

Managing Director
Senior Equity Analyst

Sector Expertise

Energy, Utilities

Industry Experience

20 years | TCW 19 years

Education

University of California, San Diego

- BS in Structural Engineering

University of Southern California, Marshall School of Business

- MBA



THOMAS LEE

Managing Director
Senior Equity Analyst

Sector Expertise

Semiconductors and Semi-Cap Equipment,
Telecom Equipment and Services

Industry Experience

14 years | TCW 5 years

Education

University of Illinois, Urbana-Champaign

- BS in Electrical Engineering
- MS in Electrical Engineering

University of Chicago

- MBA



JOSEPH SHAPOSHNIK

Managing Director
Senior Equity Analyst

Sector Expertise

Industrials, Basic Materials

Industry Experience

11 years | TCW 8 years

Education

University of California, Berkeley

- BS in Business Administration

UCLA Anderson School of Management

- MBA



JEFFREY LIN, CFA

Managing Director
Senior Equity Analyst

Sector Expertise

Computer Hardware and Storage, Electronics Manufacturing
Systems (EMS), Software, IT Services, Autos

Industry Experience

24 years | TCW 12 years

Education

University of Southern California

- BS in Electrical Engineering

University of Southern California, Marshall School of Business

- MBA with concentration in Finance and Investments



JOHN CAMPAGNOLO, CFA

Senior Vice President
Senior Equity Analyst

Sector Expertise

Financials, REITS

Industry Experience

23 years | TCW 9 years

Education

University of Southern California

- BS in Accounting

UCLA Anderson School of Management

- MBA

TCW Equity Research (CONT'D)



VERA KAHN

Senior Vice President
Senior Equity Analyst

Sector Expertise

Retail, Footwear and Apparel,
Restaurants, Supermarkets

Industry Experience

19 years | TCW 12 years

Education

Bryn Mawr College

- BA in Russian Studies

American University

- MBA in Finance



DAVID EPSTEIN, CFA

Senior Vice President
Equity Analyst

Sector Expertise

Consumer Staples, Transports,
Homebuilders/Household
Durables, Business and Consumer Services

Industry Experience

10 years | TCW 5 years

Education

University of Redlands

- BS in Business Administration

UCLA Anderson School of Management

- MBA



JASON GUPTA

Senior Vice President
Equity Analyst

Sector Expertise

Healthcare Services, IT, Life Sciences Tools,
Orthopedic Devices, Drug Retail

Industry Experience

14 years | TCW 4 years

Education

University of Michigan

- BA in Finance and Accounting

University of Pennsylvania, The Wharton School

- MBA



MATTHEW LOWE, PhD

Senior Vice President
Equity Analyst

Sector Expertise

Biotechnology, Pharmaceuticals

Industry Experience

16 years | TCW 2 year

Education

University of Oxford

- BS in Physiological Sciences
- PhD in Cardiac Pharmacology



EVAN FEAGANS

Assistant Vice President
Equity Analyst

Sector Expertise

Internet, Media, Gaming and Lodging

Industry Experience

6 years | TCW 3 years

Education

Hamilton College

- BA in Economics

Claremont McKenna College

- MA in Finance



LOVE GHOTRA

Associate Analyst

Industry Experience

5 years | TCW 2 years

Education

University of California, Irvine

- BA in Finance

Claremont McKenna College

- MA in Finance



NEHAL PATEL

Associate Analyst

Industry Experience

6 years | TCW 2 years

Education

University of California, Los Angeles

- BA

University of Chicago Booth School of Business

- MBA

III. Investment Philosophy and Process

Investment Philosophy

Strong long-term performance may be achieved by participating in the growth and success of extraordinary businesses purchased at attractive valuations.

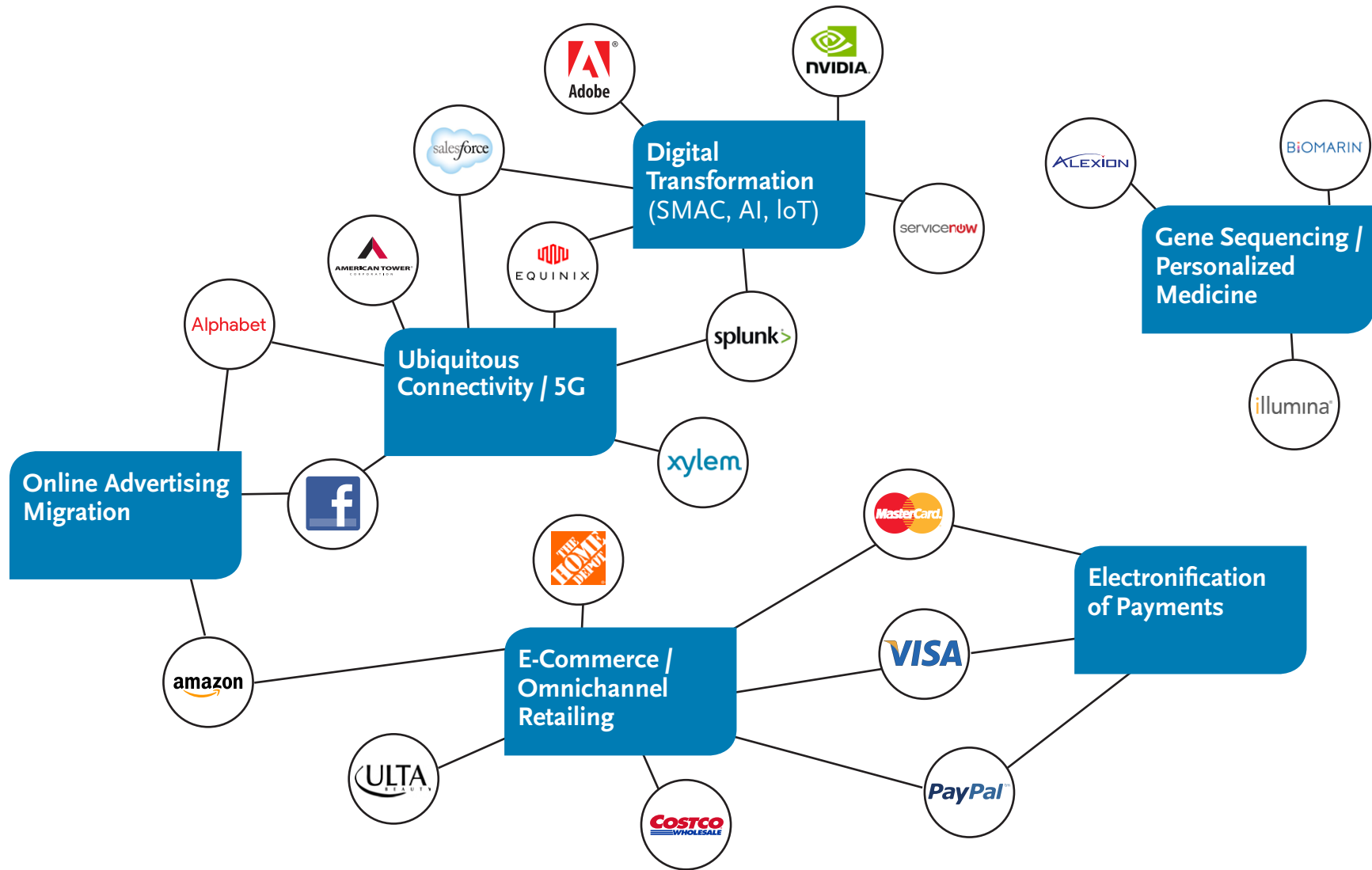


Distinguishing Features

- A concentrated portfolio of approximately 25 to 35 stocks seeking the highest quality growth opportunities
- Strict focus on companies with large end-market opportunities and clear product and/or cost advantages
- Emphasis on attractive, yet undervalued, prospects for expanding market share, widening profit margins and accelerating earnings growth
- Long-term/Low turn-over orientation
- Fundamental bottom-up research process complemented and supported by thematic macro trends
- Conviction weighted – fully invested
- Macro and systemic risk managed at portfolio level
- Consistency – no deviation from stated process
- Track record of demonstrated results over the long term

Portfolio characteristics and holdings are subject to change at any time.

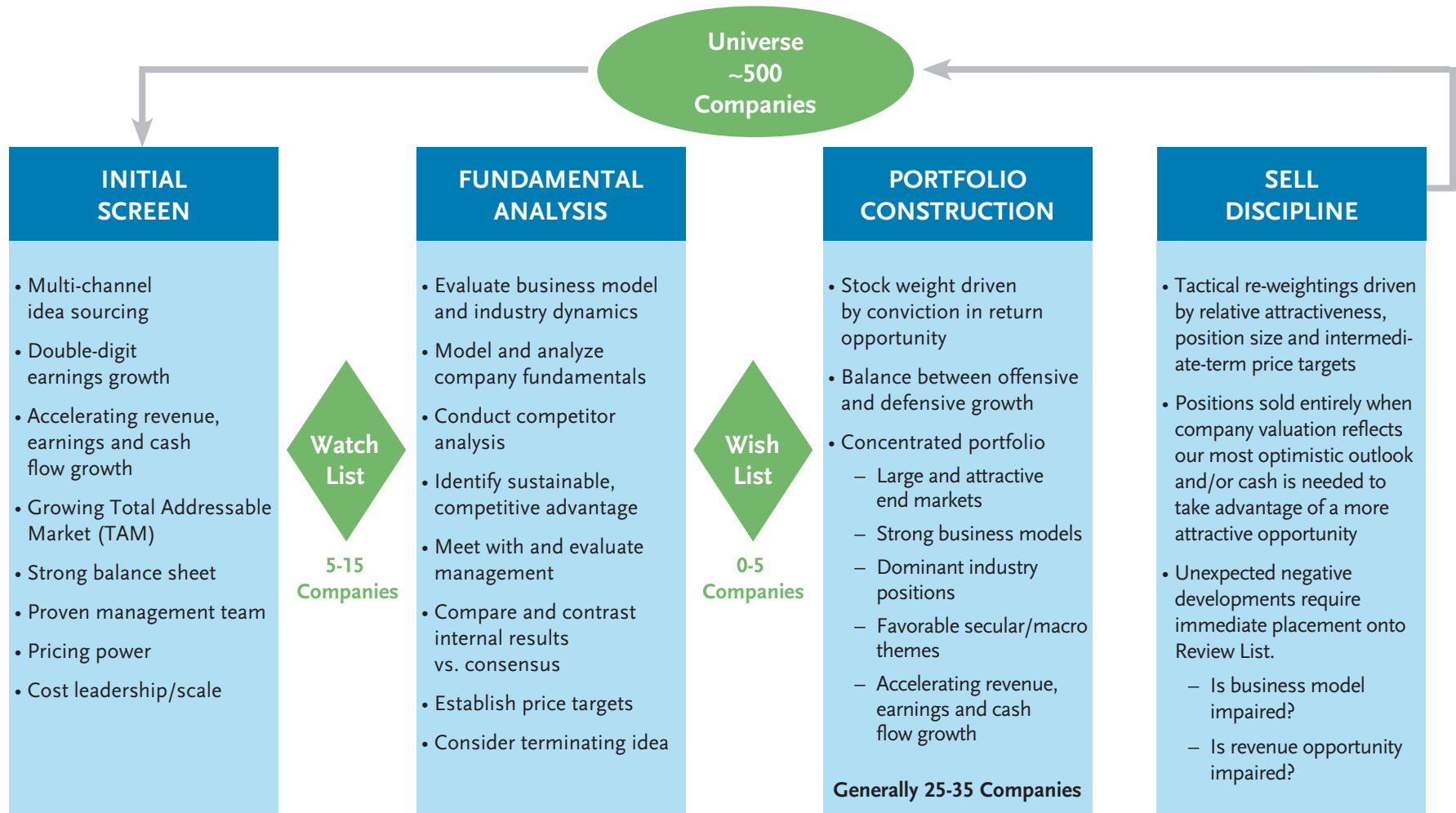
Representative Secular Trends



Portfolio characteristics and holdings are subject to change at any time.

For illustrative purposes only. No discussion with respect to specific companies should be considered a recommendation to purchase or sell any particular security/investment. The companies discussed do not represent all past investments. It should not be assumed that any of the investments discussed were or will be profitable, or that recommendations or decisions made in the future will be profitable.

Investment Process



Portfolio characteristics and holdings are subject to change at any time.

Portfolio Construction: Staying Balanced

~2/3 Offense

- “Offensive” growth:
 - Innovative stories, disruptive to end markets, accelerating earnings power and margins

~1/3 Defense

- “Defensive” growth:
 - Uncorrelated fundamentals
 - Drivers of growth depend less on GDP growth



Source: TCW

It should not be assumed that an investment in the securities listed was, or will be, profitable. For a complete list of holdings, please see Summary of Holdings in this presentation.

For illustrative purposes only. No discussion with respect to specific companies should be considered a recommendation to purchase or sell any particular security/investment. The companies discussed do not represent all past investments. It should not be assumed that any of the investments discussed were or will be profitable, or that recommendations or decisions made in the future will be profitable.

Keen Focus on Risk Management

1. Diversification

- Seek to find growth across all sectors of the economy
- Portfolio construction seeks to reduce volatility by targeting uncorrelated business fundamentals

2. Strict sell discipline

- Price targets based on proprietary cash flow estimates

3. Proprietary fundamental research

- Business risk controlled through quality framework and depth of research enabled by concentration

4. Portfolio controls

- “Top heaviness” of portfolio monitored weekly
- Generally do not add to any holding once it exceeds 5% of total portfolio

5. Leverage TCW's Portfolio Analytics Group

- Detailed attribution analysis provided on an ongoing basis
- Portfolio optimization and risk management (MSCI BARRA Aegis)
- Evaluate marginal contribution of risk for each name in the portfolio

Portfolio characteristics and holdings are subject to change at any time.

IV. Portfolio Characteristics

Portfolio Characteristics

AS OF MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

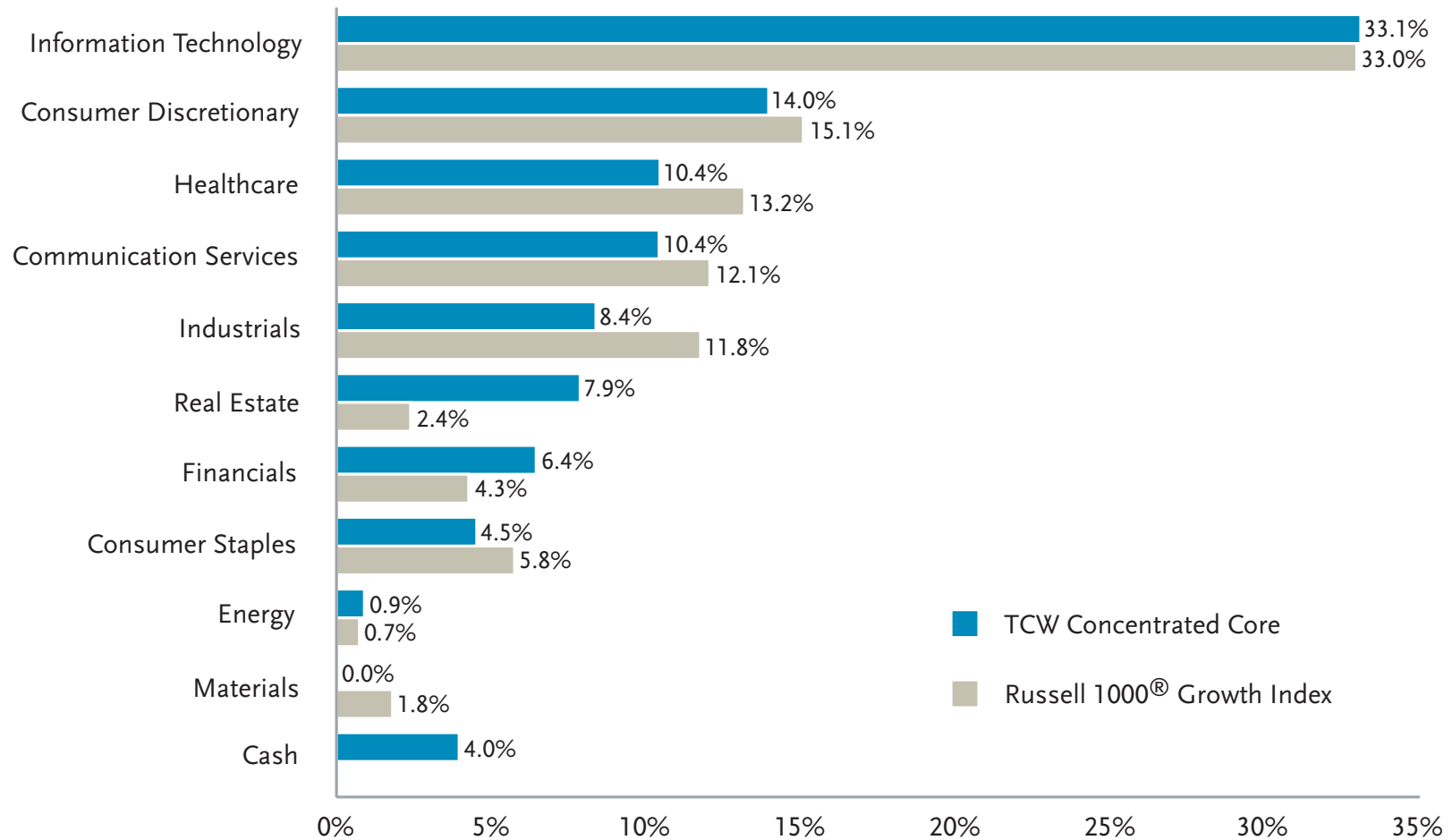
	TCW Concentrated Core	Russell 1000® Growth Index	S&P 500 Index
Number of Securities	31	545	505
Average P/E: Next 12 Months	29.30x	20.42x	16.68x
PEG Ratio - Forward 1 Yr.	1.90x	1.74x	1.68x
Price-to-Sales	5.38x	3.21x	2.34x
Debt-to-Equity	1.10x	1.22x	1.45x
Dividend Yield	0.49%	1.29%	2.00%
Projected 3-5 Yr. Revenue Growth	13.21%	9.08%	5.87%
Projected 3-5 Yr. EPS Growth	18.40%	14.00%	11.20%
Market Capitalization (Billions)			
Average (\$ Weighted)	\$210.73	\$289.95	\$230.30
Average (Equal Weighted)	\$137.75	\$35.87	\$51.39
Median	\$51.81	\$11.85	\$21.74

Source: TCW, FactSet

Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time. All projections and estimates are based on current asset prices and are subject to change.

Sector Weightings

AS OF MARCH 31, 2019 | SUPPLEMENTAL INFORMATION



Source: TCW, FactSet

Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time.

Portfolio Turnover

AS OF MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

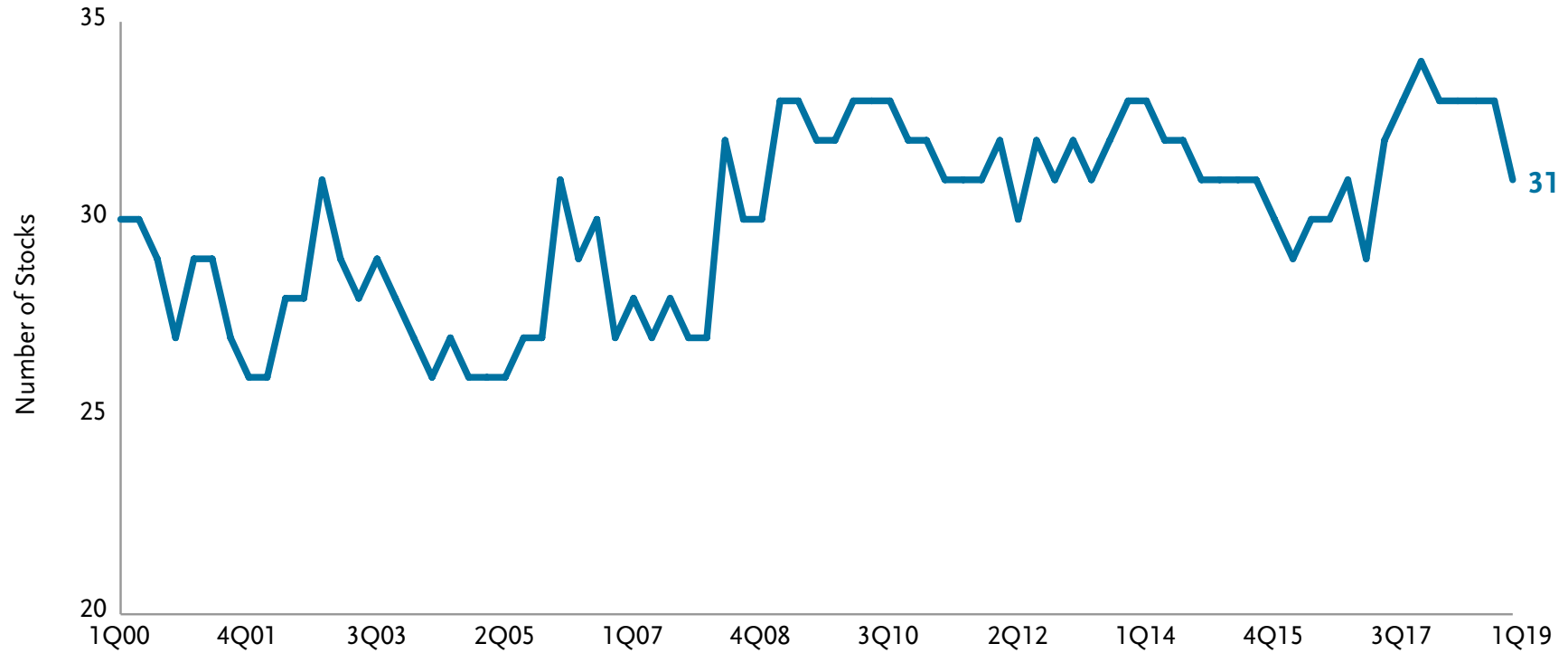
- We believe our patience and long-term outlook serve as competitive advantages
- Portfolio turnover has averaged 20.7% during the past 10 calendar years

Year	% Turnover
2010	23.8
2011	18.1
2012	19.0
2013	24.5
2014	23.6
2015	18.7
2016	22.1
2017	15.3
2018	12.3
YTD 2019	0.7

Source: TCW
Based upon a representative account.

Number of Holdings

DECEMBER 31, 2000 – MARCH 31, 2019 | SUPPLEMENTAL INFORMATION



Source: TCW
Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time.

Summary of Holdings

AS OF MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

Security	% of Portfolio
Visa Inc.	6.57
Amazon.com, Inc.	6.48
Alphabet Inc.	5.72
Adobe Inc.	5.43
American Tower Corporation	5.24
ServiceNow, Inc.	4.85
salesforce.com, inc.	4.71
Facebook, Inc.	4.69
PayPal Holdings, Inc.	3.87
Mastercard Incorporated	3.22
Home Depot, Inc.	2.79
Ulta Beauty, Inc.	2.74
Equinix, Inc.	2.63
Zoetis, Inc.	2.60
Chubb Limited	2.56
Costco Wholesale Corporation	2.46
Align Technology, Inc.	2.38

Security	% of Portfolio
Splunk Inc.	2.32
Illumina, Inc.	2.26
TransUnion	2.25
Waste Connections, Inc.	2.16
The Charles Schwab Corporation	2.14
NVIDIA Corporation	2.12
Xylem Inc.	2.07
Monster Beverage Corporation	2.07
Booking Holdings Inc.	1.96
IHS Markit Ltd.	1.90
S&P Global, Inc.	1.75
BioMarin Pharmaceutical Inc.	1.61
Alexion Pharmaceuticals, Inc.	1.60
Concho Resources Inc.	0.90
Total Equities	96.04
Cash	3.96
Total Portfolio	100.00

Source: TCW

For illustrative purposes only. Based upon a representative account.

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V. Performance

TCW Concentrated Core Composite Performance

AS OF MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

		TCW Concentrated Core		Russell 1000®			TCW Concentrated Core		Russell 1000®			TCW Concentrated Core		Russell 1000®
		Gross	Net	Growth Index			Gross	Net	Growth Index			Gross	Net	Growth Index
2019	1Q	19.34%	19.13%	16.10%	2013	1Q	7.83%	7.64%	9.54%	2007	1Q	-0.47%	-0.64%	1.19%
	YTD	19.34	19.13	16.10		2Q	-1.54	-1.71	2.06		2Q	9.64	9.45	6.86
2018	1Q	4.45	4.26	1.42	2012	3Q	12.18	11.98	8.11	2006	3Q	5.30	5.12	4.21
	2Q	7.73	7.54	5.76		4Q	9.13	8.93	10.44		4Q	0.00	-0.17	-0.77
	3Q	8.52	8.33	9.17		Year	29.97	29.06	33.48		Year	14.91	14.12	11.81
	4Q	-15.69	-15.84	-15.89		1Q	16.00	15.79	14.69		1Q	-1.55	-1.72	3.09
	Year	2.95	2.23	-1.51		2Q	-6.88	-7.05	-4.02		2Q	-5.21	-5.38	-3.90
2017	1Q	12.79	12.60	8.91	2011	3Q	7.07	6.88	6.11	2005	3Q	-1.65	-1.82	3.94
	2Q	5.76	5.57	4.67		4Q	0.87	0.69	-1.32		4Q	4.29	4.11	5.93
	3Q	5.99	5.80	5.90		Year	16.65	15.84	15.26		Year	-4.29	-4.95	9.07
	4Q	5.54	5.36	7.86		1Q	5.80	5.62	6.03		1Q	-9.46	-9.62	-4.09
	Year	33.44	32.51	30.21		2Q	1.61	1.43	0.76		2Q	3.95	3.77	2.46
2016	1Q	-7.65	-7.82	0.74	2010	3Q	-10.32	-10.48	-13.14	2004	3Q	5.34	5.16	4.01
	2Q	1.35	1.16	0.61		4Q	8.92	8.73	10.61		4Q	5.81	5.63	2.98
	3Q	5.13	4.95	4.58		Year	5.00	4.27	2.64		Year	4.91	4.19	5.26
	4Q	-5.69	-5.85	1.01		1Q	3.61	3.43	4.65		1Q	0.05	-0.12	0.79
	Year	-7.20	-7.85	7.08		2Q	-11.63	-11.79	-11.75		2Q	7.12	6.94	1.94
2015	1Q	3.32	3.14	3.84	2009	3Q	15.44	15.25	13.00	2003	3Q	-5.21	-5.38	-5.23
	2Q	1.83	1.65	0.12		4Q	11.40	11.20	11.83		4Q	11.75	11.56	9.17
	3Q	-2.29	-2.46	-5.29		Year	17.75	16.92	16.71		Year	13.53	12.75	6.30
	4Q	9.87	9.67	7.32		1Q	1.07	0.90	-4.12		1Q	4.37	4.23	-1.07
	Year	12.93	12.14	5.67		2Q	15.06	14.87	16.32		2Q	20.73	20.58	14.31
2014	1Q	-0.67	-0.84	1.12	2008	3Q	13.46	13.27	13.97	2002	3Q	7.94	7.79	3.91
	2Q	3.11	2.93	5.13		4Q	9.00	8.81	7.94		4Q	11.38	11.21	10.41
	3Q	0.25	0.08	1.49		Year	43.81	42.84	37.21		Year	51.49	50.66	29.75
	4Q	5.46	5.27	4.78		1Q	-13.69	-13.85	-10.18		1Q	-0.06	-0.20	-2.59
	Year	8.29	7.53	13.05		2Q	3.93	3.75	1.25		2Q	-21.29	-21.41	-18.67
					3Q	-12.74	-12.90	-12.33	3Q	-19.67	-19.79	-15.05		
					4Q	-18.81	-18.96	-22.79	4Q	12.67	12.52	7.15		
					Year	-36.45	-36.91	-38.44	Year	-28.81	-29.22	-27.88		

Source: TCW

Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. Past performance is no guarantee of future results.

TCW Concentrated Core Composite Performance (CONT'D)

AS OF MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

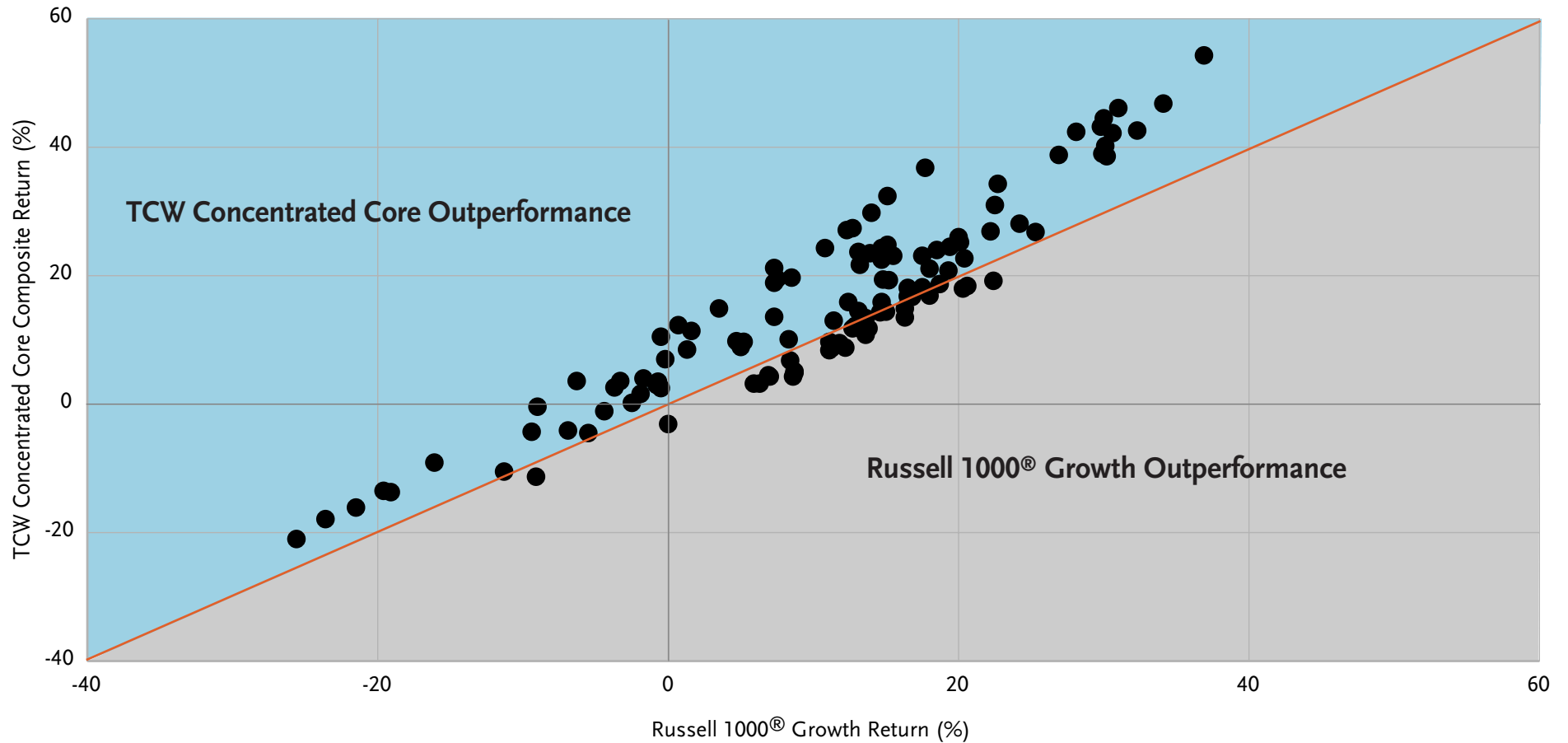
		TCW Concentrated Core		Russell 1000®			TCW Concentrated Core		Russell 1000®			TCW Concentrated Core		Russell 1000®																																								
		Gross	Net	Growth Index			Gross	Net	Growth Index			Gross	Net	Growth Index																																								
2001	1Q	-22.20%	-22.32%	-20.90%	1995	1Q	13.34%	13.19%	9.52%	1989	1Q	9.24%	9.10%	6.95%																																								
	2Q	11.58	11.43	8.42		2Q	15.48	15.33	9.83		2Q	9.83	9.68	10.08																																								
	3Q	-25.86	-25.97	-19.41		3Q	11.97	11.82	9.08		3Q	14.43	14.28	12.44																																								
	4Q	26.15	25.99	15.14		4Q	-1.32	-1.46	4.55		4Q	-5.60	-5.73	2.69																																								
	Year	-18.81	-19.26	-20.42		Year	44.63	43.86	37.19		Year	29.61	28.91	35.92																																								
2000	1Q	17.37	17.22	7.13	1994	1Q	-2.84	-2.98	-4.41	1988	1Q	16.31	16.16	3.10																																								
	2Q	0.56	0.42	-2.70		2Q	-2.64	-2.77	-1.02		2Q	10.76	10.61	5.37																																								
	3Q	-0.78	-0.91	-5.38		3Q	8.20	8.05	7.69		3Q	7.21	7.07	-0.43																																								
	4Q	-18.22	-18.34	-21.35		4Q	2.23	2.09	0.75		4Q	1.14	1.00	2.86																																								
	Year	-4.22	-4.75	-22.42		Year	4.63	4.06	2.66		Year	39.69	38.94	11.27																																								
1999	1Q	12.29	12.14	6.36	1993	1Q	4.89	4.75	-0.84	1987	4Q	-23.28	-23.40	-23.44																																								
	2Q	3.49	3.35	3.85		2Q	4.69	4.54	-1.55																																													
	3Q	-6.70	-6.83	-3.66		3Q	13.99	13.84	1.48																																													
	4Q	31.80	31.63	25.14		4Q	-0.19	-0.33	3.87																																													
	Year	42.89	42.13	33.16		Year	24.93	24.26	2.90																																													
1998	1Q	19.28	19.12	15.15	1992	1Q	0.24	0.10	-4.94	<h3>Total Annualized Returns</h3> <table border="1"> <thead> <tr> <th></th> <th colspan="2">TCW Concentrated Core</th> <th>Russell 1000®</th> </tr> <tr> <th></th> <th>Gross</th> <th>Net</th> <th>Growth Index</th> </tr> </thead> <tbody> <tr> <td>1 Year</td> <td>17.63%</td> <td>16.81%</td> <td>12.75%</td> </tr> <tr> <td>3 Years</td> <td>18.11</td> <td>17.28</td> <td>16.53</td> </tr> <tr> <td>5 Years</td> <td>13.37</td> <td>12.58</td> <td>13.50</td> </tr> <tr> <td>7 Years</td> <td>13.54</td> <td>12.74</td> <td>14.34</td> </tr> <tr> <td>10 Years</td> <td>17.37</td> <td>16.56</td> <td>17.52</td> </tr> <tr> <td>15 Years</td> <td>9.99</td> <td>9.23</td> <td>9.71</td> </tr> <tr> <td>20 Years</td> <td>7.76</td> <td>7.04</td> <td>5.51</td> </tr> <tr> <td>Since 10/1/87</td> <td>14.50</td> <td>13.79</td> <td>9.45</td> </tr> </tbody> </table>						TCW Concentrated Core		Russell 1000®		Gross	Net	Growth Index	1 Year	17.63%	16.81%	12.75%	3 Years	18.11	17.28	16.53	5 Years	13.37	12.58	13.50	7 Years	13.54	12.74	14.34	10 Years	17.37	16.56	17.52	15 Years	9.99	9.23	9.71	20 Years	7.76	7.04	5.51	Since 10/1/87	14.50	13.79	9.45
		TCW Concentrated Core		Russell 1000®																																																		
		Gross	Net	Growth Index																																																		
	1 Year	17.63%	16.81%	12.75%																																																		
	3 Years	18.11	17.28	16.53																																																		
5 Years	13.37	12.58	13.50																																																			
7 Years	13.54	12.74	14.34																																																			
10 Years	17.37	16.56	17.52																																																			
15 Years	9.99	9.23	9.71																																																			
20 Years	7.76	7.04	5.51																																																			
Since 10/1/87	14.50	13.79	9.45																																																			
2Q	6.10	5.96	4.54	2Q	-3.45	-3.58	-1.09																																															
3Q	-5.40	-5.53	-9.08	3Q	5.10	4.96	4.40																																															
4Q	26.12	25.96	26.74	4Q	14.08	13.93	6.97																																															
Year	51.00	50.20	38.71	Year	16.03	15.40	5.00																																															
1997	1Q	1.18	1.05	0.54	1991	1Q	26.60	26.44	17.94																																													
	2Q	27.88	27.72	18.91		2Q	3.22	3.08	-0.96																																													
	3Q	18.37	18.21	7.52		3Q	6.39	6.24	6.99																																													
	4Q	-4.23	-4.36	1.52		4Q	15.09	14.94	12.96																																													
	Year	46.68	45.90	30.49		Year	60.00	59.16	41.16																																													
1996	1Q	3.57	3.43	5.37	1990	1Q	1.54	1.40	-3.70																																													
	2Q	6.93	6.79	6.36		2Q	6.06	5.91	10.13																																													
	3Q	5.30	5.16	3.60		3Q	-14.51	-14.64	-15.24																																													
	4Q	11.27	11.12	6.04		4Q	10.21	10.06	10.95																																													
	Year	29.76	29.07	23.12		Year	1.46	0.90	-0.26																																													

Source: TCW

Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. Past performance is no guarantee of future results.

TCW Concentrated Core Composite Excess Performance

ROLLING 3 YEAR GROSS QUARTERLY RETURNS | SINCE INCEPTION THROUGH MARCH 31, 2019 | SUPPLEMENTAL INFORMATION



Source: Morningstar Direct

Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. Past performance is no guarantee of future results.

VI. Performance Review

Alameda County Employees' Retirement Association Performance

AS OF MAY 31, 2019 | SUPPLEMENTAL INFORMATION

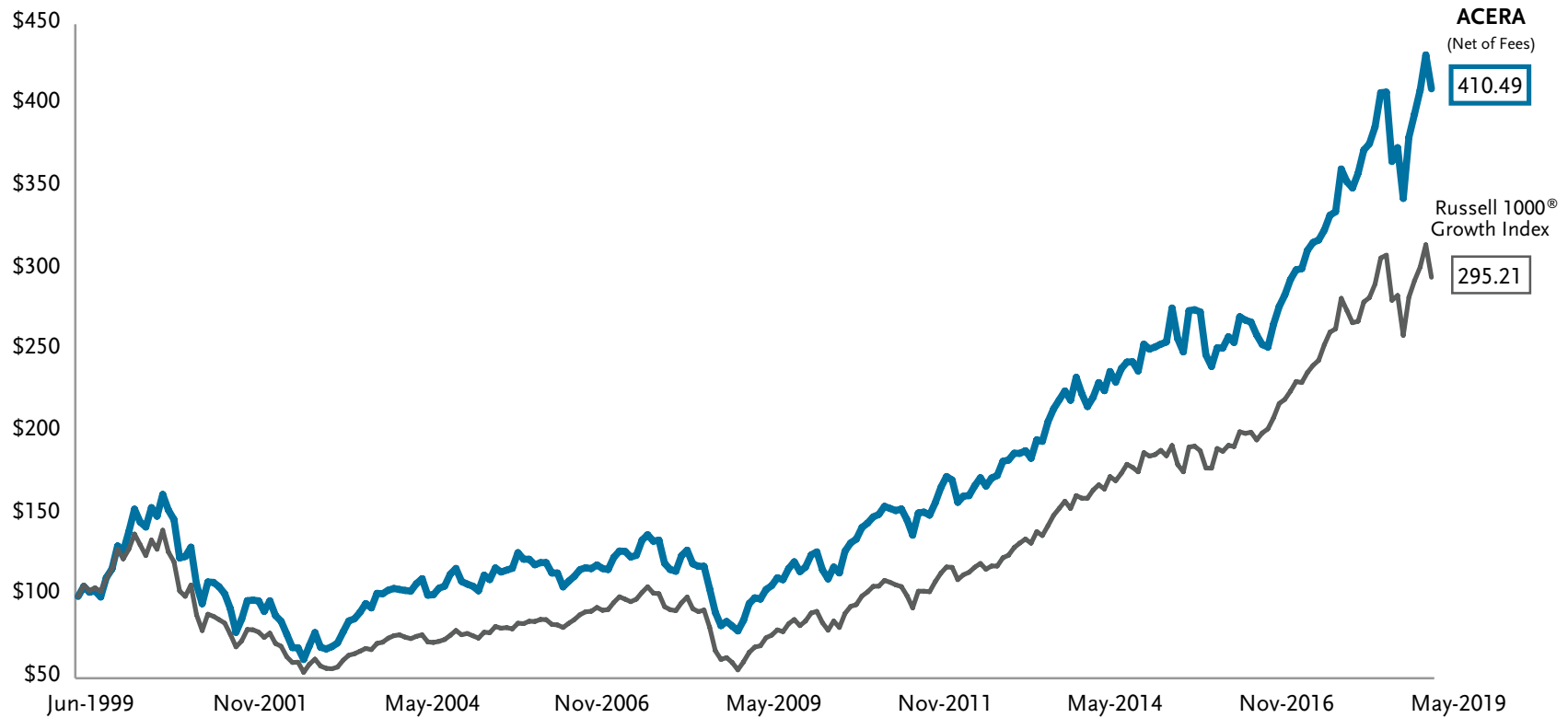
Return (%)	May YTD	1Q19	Annualized					ITD 6/4/99
			1 Year	3 Years	5 Years	7 Years	10 Years	
ACERA (Net)	19.5	19.3	10.1	16.6	13.1	14.7	15.3	7.3
Russell 1000® Growth Index	13.7	16.1	5.4	15.3	12.3	15.1	15.6	5.4
S&P 500 Index	10.7	13.7	3.8	11.7	9.7	13.5	13.9	5.8

Source: TCW

Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. Past performance is no guarantee of future results.

ACERA Performance Since Inception

AS OF MAY 31, 2019 | SUPPLEMENTAL INFORMATION



Source: TCW

Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. Past performance is no guarantee of future results.

YTD 2019 Outperformance Driven by Bigger Weightings (COMPOSITE)

JANUARY 1, 2019 THROUGH MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

Ten Best Stocks in 2019 (%)

	Average Weight	1Q Security Change	1Q Portfolio Impact	
NOW	4.65	38.46	1.61	+11.01%
FB	4.76	27.16	1.26	
AMZN	6.46	18.56	1.24	
V	6.45	18.59	1.18	
AMT	4.96	24.57	1.17	
ADBE	5.55	17.79	0.99	
ULTA	2.52	42.43	0.96	
PYPL	3.97	23.44	0.91	
CRM	5.49	15.68	0.89	
GOOG	5.84	13.30	0.81	

Average Weighting
5.06%

Ten Worst Stocks in 2019 (%)

	Average Weight	1Q Security Change	1Q Portfolio Impact	
MNST	2.31	10.89	0.30	+1.66%
CELG	0.04	38.46	0.28	
INFO	1.75	13.33	0.25	
CB	2.60	9.02	0.23	
SCHW	2.35	3.31	0.13	
BMRN	1.79	4.32	0.12	
CXO	0.99	8.07	0.11	
WST	0.82	7.27	0.11	
ILMN	2.18	3.43	0.09	
BKNG	2.14	1.31	0.04	

Average Weighting
1.70%






Source: TCW, FactSet

Portfolio characteristics and holdings are subject to change at any time. The holdings identified do not represent all of the securities purchased, sold or recommended for advisory clients. It should not be assumed that an investment in the securities listed was, or will be, profitable. Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. All performance information is represented on a gross basis unless otherwise stated. To obtain the calculation's methodology and a list showing every holding's contribution to the overall account's performance during the period, contact your TCW client service representative or e-mail your request to PortfolioAnalytics.Group@tcw.com. Past performance is no guarantee of future results.






1Q 2019: What Helped, What Hurt (COMPOSITE)

JANUARY 1, 2019 – MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

Five Best Contributors (%)

	1Q19 Average Weight	1Q19 Security Change	1Q19 Portfolio Impact	Date Purchased in Strategy
ServiceNow, Inc.	4.65	38.46	1.61 	January-14
Facebook, Inc.	4.76	27.16	1.26 	October-14
Amazon.com, Inc.	6.46	18.56	1.24 	December-02
Visa Inc.	6.45	18.59	1.18 	March-08
American Tower Corporation	4.96	24.57	1.17 	February-10

Five Worst Contributors (%)

	1Q19 Average Weight	1Q19 Security Change	1Q19 Portfolio Impact	Date Purchased in Strategy
BioMarin Pharmaceutical Inc.	1.79	4.32	 0.12	May-13
Concho Resources Inc.	0.99	8.07	 0.11	December-16
West Pharmaceutical Services, Inc.	0.82	7.27	 0.11	July-17
Illumina, Inc.	2.18	3.43	 0.09	March-14
Booking Holdings Inc.	2.14	1.31	 0.04	June-10

Source: TCW, FactSet

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1Q 2019: Attribution Analysis

JANUARY 1, 2019 – MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

Sector Returns (%)

		Difference
Communication Services	TCW: 19.15 Russell 1000® Growth Index: 16.69	2.46
Consumer Discretionary	TCW: 18.34 Russell 1000® Growth Index: 15.39	2.95
Consumer Staples	TCW: 15.23 Russell 1000® Growth Index: 10.92	4.31
Energy	TCW: 8.07 Russell 1000® Growth Index: 14.43	-6.36
Financials	TCW: 10.70 Russell 1000® Growth Index: 13.25	-2.55
Healthcare	TCW: 20.36 Russell 1000® Growth Index: 7.43	12.93
Industrials	TCW: 17.56 Russell 1000® Growth Index: 16.30	1.25
Information Technology	TCW: 22.61 Russell 1000® Growth Index: 21.36	1.25
Materials	TCW: 0.00 Russell 1000® Growth Index: 14.92	-14.92
Real Estate	TCW: 26.12 Russell 1000® Growth Index: 18.86	7.26

TCW Russell 1000® Growth Index

Sector Attribution (%)

		Total
Communication Services	Security Selection: 0.25 Asset Allocation: -0.01	0.24
Consumer Discretionary	Security Selection: 0.40 Asset Allocation: 0.02	0.42
Consumer Staples	Security Selection: 0.24 Asset Allocation: 0.08	0.32
Energy	Security Selection: -0.05 Asset Allocation: 0.01	-0.04
Financials	Security Selection: -0.16 Asset Allocation: -0.05	-0.21
Healthcare	Security Selection: 1.33 Asset Allocation: 0.23	1.56
Industrials	Security Selection: 0.06 Asset Allocation: -0.01	0.05
Information Technology	Security Selection: 0.49 Asset Allocation: 0.10	0.59
Materials	Security Selection: 0.00 Asset Allocation: 0.03	0.03
Real Estate	Security Selection: 0.48 Asset Allocation: 0.12	0.60

Security Selection Asset Allocation

Source: TCW, FactSet

Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time.






All performance information is represented on a gross basis unless otherwise stated; net performance is contained in the appendix GIPS performance disclosures.

Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. Past performance is no guarantee of future results.






2018: What Helped, What Hurt (COMPOSITE)

JANUARY 1, 2018 – DECEMBER 31, 2018 | SUPPLEMENTAL INFORMATION

Five Best Contributors (%)

	2018 Average Weight	2018 Security Change	2018 Portfolio Impact	Date Purchased in Strategy
salesforce.com, inc.	5.04	33.96	1.49 	October-05
ServiceNow, Inc.	4.00	36.57	1.25 	January-14
Adobe Inc.	5.39	29.09	1.24 	February-16
Amazon.com, Inc.	6.56	28.43	1.22 	December-02
Visa Inc.	6.14	16.48	0.81 	March-08

Five Worst Contributors (%)

	2018 Average Weight	2018 Security Change	2018 Portfolio Impact	Date Purchased in Strategy
Facebook, Inc.	5.33	-25.71	 -1.13	October-14
NVIDIA Corporation	1.40	-39.29	 -1.10	April-18
Celgene Corporation	1.91	-38.66	 -0.72	June-13
Equinix, Inc.	2.65	-20.41	 -0.64	July-12
Monster Beverage Corporation	2.38	-22.24	 -0.57	February-15

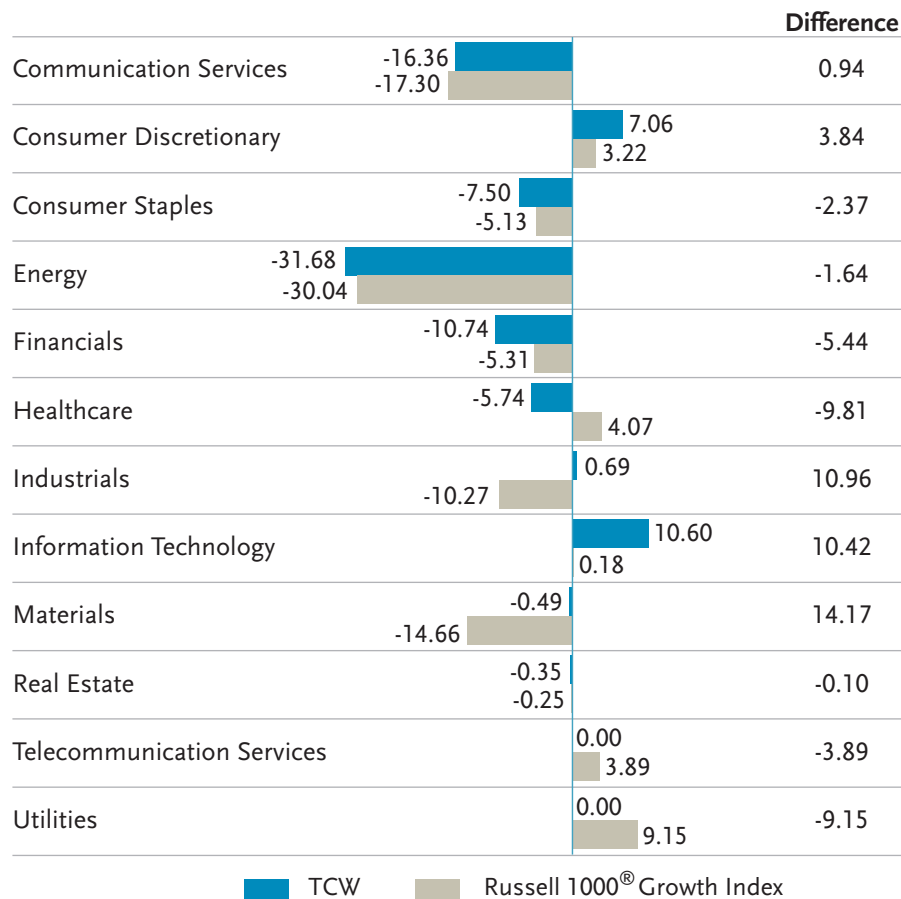
Source: TCW, FactSet

Portfolio characteristics and holdings are subject to change at any time. The holdings identified do not represent all of the securities purchased, sold or recommended for advisory clients. It should not be assumed that an investment in the securities listed was, or will be, profitable. Please see additional disclosures in the appendix, which are an integral and important part of this presentation. Individual results may vary. All performance information is represented on a gross basis unless otherwise stated. To obtain the calculation's methodology and a list showing every holding's contribution to the overall account's performance during the period, contact your TCW client service representative or e-mail your request to PortfolioAnalytics.Group@tcw.com. Past performance is no guarantee of future results.

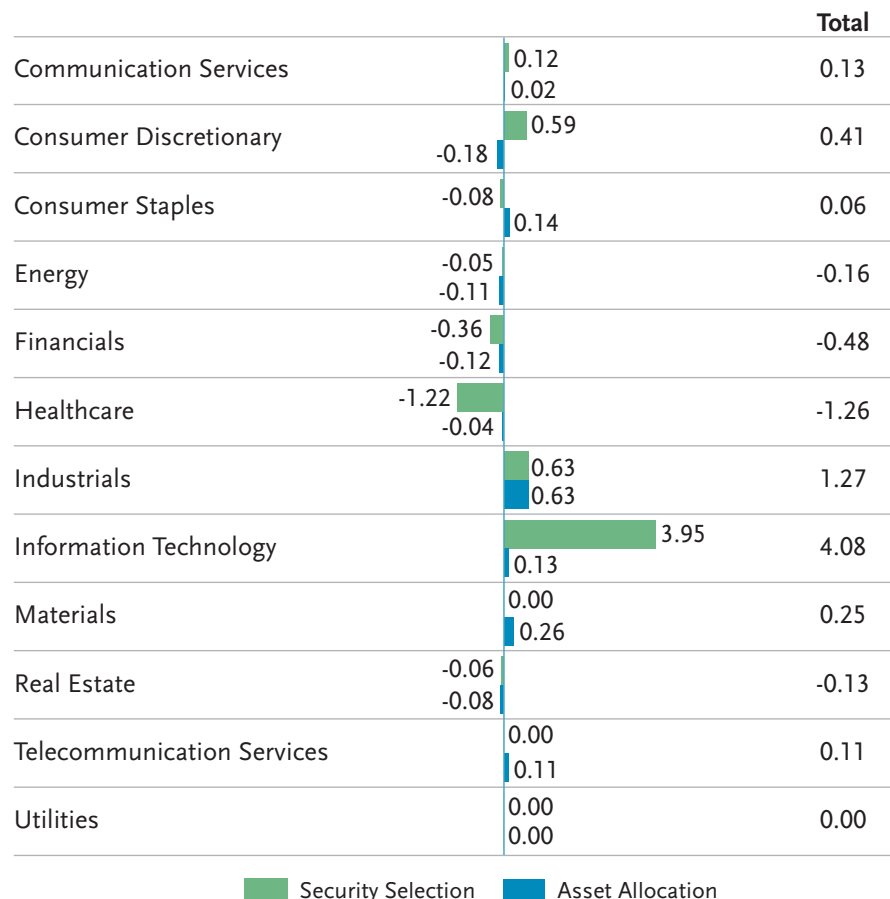
2018: Attribution Analysis

JANUARY 1, 2018 – DECEMBER 31, 2018 | SUPPLEMENTAL INFORMATION

Sector Returns (%)



Sector Attribution (%)



Source: TCW, FactSet

Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time.

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Buys and Sells

JANUARY 1, 2019 – MARCH 31, 2019 | SUPPLEMENTAL INFORMATION

Buys

There were no new buys during the quarter.

Sells

West Pharmaceutical Services, Inc. (WST)
Celgene Corporation (CELG)

Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time. It should not be assumed that an investment in the securities listed was, or will be, profitable. This material includes a partial list of past specific recommendations, reflecting all buys and all sells during the quarter. For a complete list of all representative buys and sells for a given time period, please contact TCW at contact@tcw.com. For illustrative purposes only. No discussion with respect to specific companies should be considered a recommendation to purchase or sell any particular security/investment. The companies discussed do not represent all past investments. It should not be assumed that any of the investments discussed were or will be profitable, or that recommendations or decisions made in the future will be profitable.

VII. Appendix

Quarterly Review

AS OF MARCH 31, 2019

Performance

The TCW Concentrated Core strategy generated a return of +19.34% gross (+19.13% net of fees and expenses) during the quarter, outperforming the Russell 1000® Growth Index return of +16.10%. Positive security selection effects (primarily in the healthcare, information technology and real estate sectors) led to the strategy's relative outperformance during 1Q19.

Investment Environment

After the worst December on record for the S&P 500 in 2018, the benchmark snapped back in 1Q19 and posted its best quarterly return (+13.6%) in nearly a decade. The NASDAQ Composite finished the quarter +16.8%, while the Dow Jones Industrial Average finished +11.2%, respectively. The VIX index dropped 46%, while the price of oil increased 32.4%. Bond yields fell across global markets and by the end of the quarter there were nearly \$10 trillion in negatively yielding bonds. After flirting with inversion for months, in late March the yield curve (3 months/10 year US Treasury Bonds) finally inverted for the first time since mid-2007.

Amidst slowing global growth, economic data in the U.S. remain largely supportive of the market's advance. The U.S. labor market is in expansion territory, the unemployment rate remains stable (4%) and the NAHB (National Association of Homebuilders) housing market index remains on solid footing and ticked up during the quarter. The U.S. consumer is in relatively good shape (debt payments are 9.9% of disposable personal income in 1Q19 vs. 13.2% in 4Q07; household net worth is \$109.1 trillion) and ISM remains over 50. President Trump delayed a tariff rate increase on \$200B of Chinese imports as the market awaits the potential for a trade deal between the world's two largest economies. China's retail sales and production numbers are weakening and China's efforts to stimulate its economy do not appear to be taking hold yet.

While the U.S. economy continues to chug along, we believe the key reason for the abrupt bounce in the equity markets from December was the Fed's dovish pivot. After raising rates another ¼ point in December (and the market selling off), in January Fed Chairman Powell noted that, "we can afford to be patient" with policy moves, giving

Source: TCW Portfolio Analytics, Factsset

* Total attribution effect relative to the Russell 1000® Growth

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bulls hope that a rate pause may be in order. The "Powell Put" now appears to be in play. March's FOMC statement noted the median projection for 2019 dropped from two hikes in December to zero in March, and the Fed now intends to stop its balance sheet runoff at the end of September. Interestingly, market expectations now indicate a better than 50% chance of a rate cut by September. Our focus now turns to second quarter earnings season and whether a U.S.-China trade deal can finally be struck.

Sector Weightings

Including the contribution of sector allocation and security selection, our healthcare and information technology weightings helped relative results most and our financials and energy weightings most negatively impacted performance during 1Q19. Align Technology, Inc. (ALGN) and ServiceNow, Inc. (NOW) were our best performing healthcare and information technology holdings while The Charles Schwab Corporation (SCHW) and Concho Resources Inc. (CXO) were our worst performing financials and energy holdings.

Top 10 Contributing Stocks

	Average Weight (%)	Total Effect (%)*
ServiceNow	4.65	0.83
Ultra Beauty	2.52	0.53
Align Technology	2.11	0.32
American Tower	4.96	0.31
Alexion	1.56	0.27
Equinix	2.51	0.25
Paypal	3.97	0.20
Nvidia	1.95	0.20
Facebook	4.76	0.19
Celgene	0.04	0.15

Bottom 10 Contributing Stocks

	Average Weight (%)	Total Effect (%)*
Charles Schwab	2.35	-0.21
Illumina	2.18	-0.21
Booking	2.14	-0.21
Chubb	2.60	-0.20
Biomarin Pharm	1.79	-0.16
West Pharm	0.82	-0.08
Alphabet	5.84	-0.08
Monster Beverage	2.31	-0.07
Concho	0.99	-0.06
Home Depot	2.84	-0.04

Quarterly Review (CONT'D)

AS OF MARCH 31, 2019

Security Selection

Our strongest performance on a security-specific basis came from the information technology and consumer discretionary sectors. Shares of ServiceNow, Inc. (NOW) rallied after reporting strong 4Q18 results that included over \$1.5 billion in total contract value signed during the quarter and the company guided billings growth above consensus estimates. Management noted that all of its products exceeded their expectations, 18 customers are now spending >\$10 million annually with NOW, and net new ACV (Average Contract Value) growth accelerated in its core IT Service Management business. We remain bullish on NOW given its competitive position and market share capture in a growing end market. Shares of Ulta Beauty, Inc. (ULTA) moved higher after reporting solid 4Q18 results. Comps of +9.4% topped consensus estimates, mass cosmetics accelerated in the quarter and digitally native brands including Kylie and James Charles performed well. We remain positive on ULTA given the company's competitive position in the fast growing and fragmented beauty products and services industry.

Our weakest performance on a security-specific basis came from the financials and healthcare sectors. Despite reporting solid 4Q18 results that topped consensus earnings estimates, shares of The Charles Schwab Corporation (SCHW) failed to keep up with the broader 1Q19 market rally as investors fret over the flattening yield curve and potential deposit pricing pressure. While we acknowledge the recent collapse in yields and the Fed's signaling of pausing on further hikes presents a headwind for NIM (Net Interest Margin) expansion, we believe it may also bring less deposit competition for SCHW. In our opinion, fundamentals remain solid (the company continues to take market share and net new asset growth is as strong as it has been in a decade) and we believe SCHW's value proposition should sustain its industry leading deposit beta given the company's economics are more influenced by short-term rates than the broader yield curve. We remain positive on SCHW given its scale, record profit margins and opportunity for growth. Shares of Illumina, Inc. (ILMN) moved lower after the company reported mixed 4Q18 results. While sales were in-line with ILMN's preannouncement, EPS missed consensus estimates and FY2019 guidance is somewhat back-half weighted, leading some investors to question whether 2019 numbers are at risk. The company's NovaSeq launch ended 2018 modestly short of initial guidance but we believe product momentum remains solid and management has noted that NovaSeq revenue has ramped faster than any other platform in Illumina's history. We believe the company's end market remains healthy (specifically in population sequencing, NIPT and oncology) and remain positive on ILMN shares.

Market Outlook

An irrefutably dovish pivot by the Fed together with upside in U.S. March PMIs and retail sales have dampened the end-of-cycle fears that ravaged risk markets into year-end 2018. Investors now enjoy the comfort of a modest re-steepening of the curve, still-low global short rates, exceptionally strong jobs and claims data in the U.S., low volatility and a clear move higher in credit and equity markets. Even China's "whatever it takes" stimulus appears to have successfully deflected a hard landing in the region, at least for now. Recent Chinese data (GDP, PMI, Industrial Production, Retail Sales, Housing, Bank Loans) all printed to the upside following Beijing's decision to hold credit spigots wide open to support growth. The uptrend in copper and iron ore prices also appear to confirm the rebound. Yes, the Lunar New Year can produce volatility in these data, but we do acknowledge some degree of improvement to the China story. With respect to trade discussions, we expect the meandering path forward to continue with progress on enforcement and reduced tariffs grabbing most headlines. Big picture, then, we think the global (ex-Eurozone) rebound in new order activity probably supports an improvement in growth prospects intermediate term. Longer-term, however, unprecedented global debt levels and lingering tail risks still make us cautious on the sustainability of this triple-overtime cycle.

There are other reasons to be critical of the setup here. Despite the rally in risk markets, classic cyclical gauges are not sending confirming signals that would tend to make us more confident in the advance, especially with indexes near record highs and already pricing steady profit growth. Small cap vs. large cap names continue to show somewhat weak relative performance as do value stocks vs. growth stocks. Relative sector performance also flashed yellow during most of the first quarter with cyclical groups like energy, industrials, materials and financials generally weak (until recently) vs. benchmarks. Finally, the U.S. Treasury yield curve, while modestly steeper vs. year-end 2018, remains historically quite flat. This makes us question how "neutral" the Fed actually is, especially given the de facto tightening that results from the relentless strength in the U.S. Dollar.

On the other hand, we are struck by some bullish high frequency data that indicates unusually robust hiring and underlying domestic strength. In particular, the weekly U.S. Initial Jobless Claims data deserves mention because its breakout performance is both a support for the current market advance and an important leading indicator of economic health. The strength (new low) in the data series has been remarkable with new claims

Quarterly Review (CONT'D)

AS OF MARCH 31, 2019

recently falling to levels not seen since 1969. In the post-war era, claims tend to rise 15-20% ahead of recession, not collapse to new cycle lows (which is happening now). We note this because the labor market strength is occurring against general weakness in core CPI, setting up a “goldilocks” environment that could very well give the advance more legs. Our sense is that the Fed, in perpetuating a decade-long cycle of cheap money, has induced a stubborn pattern of excess capacity that is capping its ability to meaningfully lift inflation. Weak producer pricing power then leads to soft CPI, a dovish Fed on hold, and more fuel for stock prices. The Fed tries to inflate goods prices, but instead keeps inflating equity prices.

So it is with this backdrop that we head into Q1 earnings season adhering to the same time-tested principles that have driven our strong returns for decades. Our process requires a resolute focus on quality and growth combined with our deep research around competitive advantage and underappreciated TAM. While we work to best understand our

macro exposures and the portfolio’s positioning against an economic outlook, we do not put capital at risk based on some perceived advantage we have in predicting geopolitical outcomes. What we *do* seek is a thorough understanding of which macro forces are currently most at work in equity markets and how our portfolio companies are likely to perform against those forces. This helps us to balance the portfolio in such a way as to optimize the number of demand drivers supporting our returns while simultaneously guiding how we spend our risk budget. We believe this approach to portfolio construction has helped the fund generate respectable relative returns without depending on a particular economic setup. Using this same practice and process, we look forward to sustaining our strong recent performance throughout the calendar year and beyond.

As always, we are truly grateful for your trust and support.

Sincerely,



Craig Blum, CFA
Portfolio Manager
Group Managing Director
Equities



Brandon D. Bond, CFA
Managing Director
Senior Analyst
Equities



Brian M. McNamara
Managing Director
Analyst & Portfolio Specialist
Equities



Robert J. Park, CFA
Managing Director
Senior Analyst
Equities

Source: TCW

Based upon a representative account. Portfolio characteristics and holdings are subject to change at any time. It should not be assumed that an investment in the securities listed was, or will be, profitable.

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An investment in the strategy described herein has risks, including the risk of losing some or all of the invested capital. An investor should carefully consider the risks and suitability of an investment strategy based on their own investment objectives and financial position. There is no assurance that the investment objectives and/or trends will come to pass or be maintained. The information contained herein may include preliminary information and/or “forward-looking statements.” Due to numerous factors, actual events may differ substantially from those presented herein. TCW assumes no duty to update any forward-looking statements or opinions in this document. This material comprises the assets under management of The TCW Group, Inc. and its subsidiaries, including TCW Investment Management Company LLC, TCW Asset Management Company LLC, and Metropolitan West Asset Management, LLC. Any opinions expressed herein are current only as of the time made and are subject to change without notice. The investment processes described herein are illustrative only and are subject to change. Past performance is no guarantee of future results. © 2019 TCW

The full composite performance for the strategy is available on the strategy detail page on TCW.com. Annualized returns can be found in the Performance and Approach table, and calendar year returns are contained in the Performance Disclosure document. You may also contact your TCW Client Relations Officer at 213-244-0000.

Biographies

Portfolio Manager



Craig C. Blum, CFA
Portfolio Manager
Group Managing Director
Equities

Mr. Blum is the Portfolio Manager of the TCW Concentrated Core strategy and the TCW Select Equities Fund. He joined TCW in 1999 as a Research Analyst in the Equity Research group covering data networking, communications equipment, and enterprise technology companies. In 2002, Mr. Blum became a member of the Concentrated Core/Select Equities group and was subsequently named Portfolio Manager in 2004. Prior to TCW, Mr. Blum held various positions with FMAC Capital Markets, PaineWebber and Merrill Lynch. He received his BS in Applied Mathematics and Computer Science from the University of California, Los Angeles (UCLA), and his MBA from the UCLA Anderson School of Management. Mr. Blum is a CFA charterholder.

Investment Team



Brandon D. Bond, CFA
Managing Director
Senior Analyst
Equities

Mr. Bond is a Senior Analyst with generalist research responsibilities for the Concentrated Core investment strategy, including the TCW Select Equities Fund. Previously, he was a Senior Equity Analyst on the Equity Research team covering the financial services sector. He first joined TCW in 2003 as part of the firm's Summer Associate Program. He rejoined the firm full-time in 2004 after completing his MBA in Finance and Accounting from the UCLA Anderson School of Management where he was a Student Investment Fund Fellow and Edward W. Carter Fellow. Prior to business school, he worked as a consultant in Accenture's Electronics and High-Tech Practice. Mr. Bond graduated Summa Cum Laude from Brigham Young University with a BA in Marketing Communications and minors in Business Management and Japanese. He is a CFA charterholder.



Brian M. McNamara
Managing Director
Analyst and Portfolio Specialist
Equities

Mr. McNamara joined TCW in 2012 as a Managing Director for the Concentrated Core investment strategy, including the TCW Select Equities Fund. He brings over 16 years of investment acumen to TCW, including experience as an Analyst, Investment Banker, and Institutional Salesman. Prior to joining TCW, Mr. McNamara was a regional head of sales for Jefferies, where he successfully covered major mutual fund and hedge fund accounts and managed a staff of 20 professionals in San Francisco and Los Angeles. Preceding Jefferies, he worked as an Institutional Equity Salesman in the San Francisco office of both Deutsche Bank and JP Morgan. Mr. McNamara began his investment career as an Investment Banking Analyst at Jefferies and later worked as an Analyst at JP Morgan before moving into Institutional Sales. Mr. McNamara received his BA from the University of California, Los Angeles (UCLA) and his MBA from the UCLA Anderson School of Management. In addition, he holds Series 4, 7, 24, and 63 FINRA licenses.



Robert J. Park, CFA
Senior Analyst
Managing Director
Equities

Mr. Park is a Senior Equity Analyst for the TCW Concentrated Core strategy and also serves as the Portfolio Manager of the TCW Global Healthcare strategy. Prior to joining TCW in 2001, Mr. Park was an Analyst at Newell Associates, a Palo Alto based investment management firm. While attending the University of Chicago Graduate School of Business, he interned at Wanger Asset Management. Mr. Park holds a BA in Economics from Stanford University and an MBA from the University of Chicago Graduate School of Business. He is a CFA charterholder.

TCW Concentrated Core Composite Performance

ASSET-WEIGHTED AND TIME-WEIGHTED RATES OF RETURN

	Annual Return		Russell 1000® Growth Index (%)	# of Portfolios	Total Composite Assets at End of Period (U.S.\$ millions)	% of Non-Fee Paying Assets	Composite Internal Dispersion	Composite 3-Year Standard Deviation Annualized	Benchmark 3-Year Standard Deviation Annualized	Total Firm Assets (MSD)* (U.S.\$ millions)
	Gross (%)	Net (%)								
2008	-36.45	-36.91	-38.44	33	2,961.78	—	0.83	17.35	16.63	52,919
2009	43.81	42.84	37.21	29	3,222.99	—	0.74	19.74	20.01	59,123
2010	17.75	16.92	16.71	32	2,741.00	—	0.29	21.95	22.42	40,805
2011	5.00	4.27	2.64	40	3,450.14	—	0.41	17.04	18.01	81,764
2012	16.65	15.84	15.26	39	4,047.40	—	0.24	15.92	15.88	102,490
2013	29.97	29.06	33.48	48	5,224.26	—	0.29	12.46	12.35	109,920
2014	8.29	7.53	13.05	41	4,677.85	—	0.31	11.87	9.73	144,768
2015	12.93	12.14	5.67	34	4,332.24	—	0.25	13.22	10.85	165,036
2016	-7.19	-7.84	7.08	32	3,137.40	—	0.50	14.62	11.31	177,187
2017	33.44	32.51	30.21	34	3,185.38	—	0.44	13.58	10.69	191,104

The TCW Group, Inc. is divided into three divisions: the Marketable Securities Division; the Alternative Products Division; and the Managed Accounts Division. On February 23, 2010, The TCW Group, Inc. acquired Metropolitan West Asset Management. On January 1, 2011, the Marketable Securities Division and Metropolitan West Asset Management completed a merger. Accordingly, effective January 1, 2011, Metropolitan West Asset Management was included within the Firm definition.

- Effective January 1, 2000, the Marketable Securities Division was established to provide investment advisory services in the marketable securities area. *The Marketable Securities Division is defined as the Firm for purposes of reporting performance in accordance with the Global Investment Performance Standards.
- The Marketable Securities Division of TCW Group, Inc. claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. The Marketable Securities Division has been independently verified for the periods January 2000 through December 2017. The verification reports 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.
- From January 2010 onward, results are for portfolios present for an entire month. Prior to 2010, results were calculated using portfolios present for an entire quarter. The Composite includes all portfolios managed in the strategy, except for those subject to material client restrictions, which are, therefore, deemed non-discretionary.
- Results are time-weighted and geometrically linked to yield quarterly returns, and include all items of income, gain and loss.
- Results are based on trade-date transactions.
- A complete list and description of Firm composites is available upon request.
- The internal dispersion of annual returns is measured by the standard deviation across asset-weighted portfolio returns represented within the composite for the full year. Periods with five or fewer portfolios are not statistically representative and are not presented.
- Asset-weighted results use beginning of period market values. Unless stated otherwise, asset-weighted results are shown for the entire period. Equal-weighted results represent the simple average of all composite portfolios present for the entire period.
- The currency used to express performance is U.S. dollars.
- Gross results do not reflect the deduction of management fees and other custodial fees. Including these costs would reduce the shown returns. Net results reflect the deduction of the maximum standard fee charged to U.S. institutional clients without taking into account breakpoints. Certain clients could pay a significantly higher or lower fee which would result in different net returns. A fee which is 0.50% higher than the standard U.S. institutional fee will result in the total return being reduced, over five years, by 2.53% on a compound basis. Net results do not include the deduction of custodial fees or other administrative expenses, which will also reduce the returns shown. Prior to August 2010 net returns were calculated arithmetically, afterwards net returns were calculated geometrically.
- TCW makes no representation that future investment performance will conform to past performance and it should never be assumed that past performance foretells future performance.
- Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

Source: TCW

- There currently is no minimum asset level for portfolios included in the composite. From 2Q 2000 through 3Q 2017 the minimum asset level was \$5 million.
- These results have been prepared and presented in compliance with GIPS® for the periods shown beginning in January 1988. Results prior to this date are not in compliance as we are unable to show "composite as a percentage of Firm assets" information due to the lack of Marketable Securities Division assets data. The first account managed in this fashion and included in the composite had an inception date of October 1, 1987.
- This GIPS®-compliant composite was created in 1Q 2002.
- The Composite is composed of portfolios whose objective is to outperform the benchmark over the long term by investing in a concentrated portfolio of large capitalization companies with strong and enduring business models and unique business franchise characteristics. While TCW's objective is to outperform the stated benchmark, it does not imply that this strategy shall share, or attempt to share, the same or similar characteristics of the benchmark or attempt to track the benchmark.
- The benchmark is the Russell 1000® Growth. The Russell 1000® Growth Index measures the performance of those Russell 1000® companies with higher price-to-book ratios and higher forecasted growth values. Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell® is a trademark of Russell Investment Group.
- The Composite's U.S. institutional fee schedule is as follows: 0.70% on all assets
- Leverage or derivatives are not used in the management of this composite.
- Withholding tax is not deducted from the portfolios contained in the composite.
- There are not any known inconsistencies between the local laws that the composite adheres to and the GIPS®.
- There are not any known inconsistencies between the chosen source of exchange rates and those of the benchmark.
- The performance of the Concentrated Core composite for the period from inception to March 1998 reflects performance of portfolios greater than \$5,000,000 that were managed by Glen Bickerstaff while at Transamerica Investment Services. Thereafter, it represents the performance while at TCW. The original TCW Concentrated Core performance is available upon request. For the period from November 1998 to December 31, 2004, a team of portfolio managers under the guidance and oversight of Glen Bickerstaff, who retained final authority for all buy and sell decisions, were responsible for the Concentrated Core strategy. As of January 1, 2005, Mr. Bickerstaff became senior portfolio advisor to the strategy, and the remaining team members assumed full responsibility for managing the portfolios in the composite. As of February 6, 2008 Craig Blum became sole portfolio manager.
- The benchmark changed from the S&P 500 to the Russell® 1000 Growth, effective 3Q 2002, because, based on a statistical assessment of the investment style, the new index better reflects the strategy.
- There currently is no security limitation for portfolios included in the composite. From 1Q 2006 through 3Q 2017 portfolios with a security limitation of 7.5% or less were excluded from the composite. Prior to 1Q 2006, the limitation was 5%.

INDEX DISCLOSURE

Secondary index definition, (primary index definition is found on the GIPS® disclosure page in the appendix) **S&P 500 Index** – A capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

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