

TCW Global Artificial Intelligence Equity

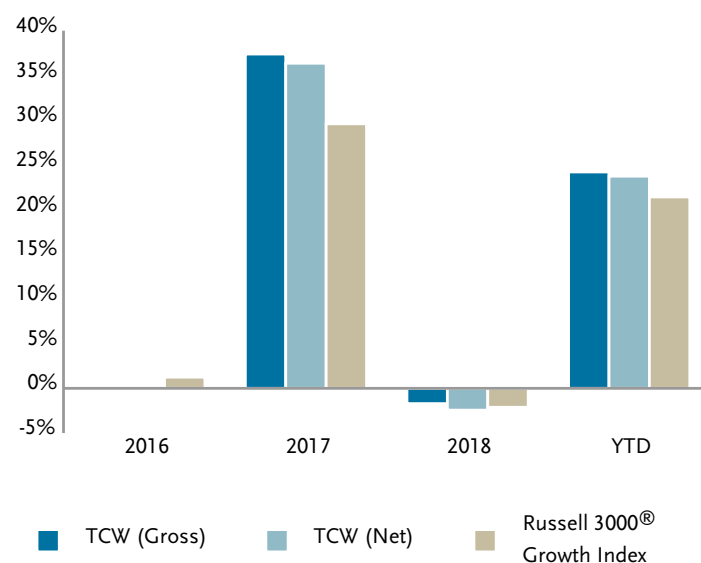
JUNE 30, 2019 | STRATEGY OVERVIEW AND ANALYSIS

The global strategy invests behind businesses that benefit from rising influence of artificial intelligence in analysis, forecasting, efficiency, automation, consistency and scale.

Performance Summary (%)

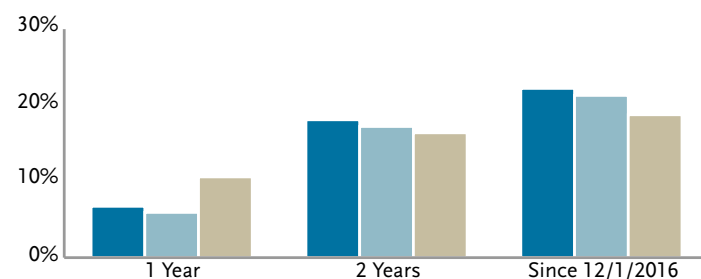
	TCW Global Artificial Intelligence Equity		Russell 3000® Growth Index
	Gross	Net	
2016 (December 1)	0.11	0.05	1.25
2017	37.39	36.36	29.59
2018	-1.71	-2.44	-2.12
YTD	24.20	23.73	21.41
2Q19	4.64	4.44	4.50

Performance Returns



Annualized Returns (%)

	TCW Global Artificial Intelligence Equity		Russell 3000® Growth Index
	Gross	Net	
1 Year	6.74	5.94	10.60
2 Years	18.10	17.22	16.39
Since 12/1/2016	22.22	21.30	18.76



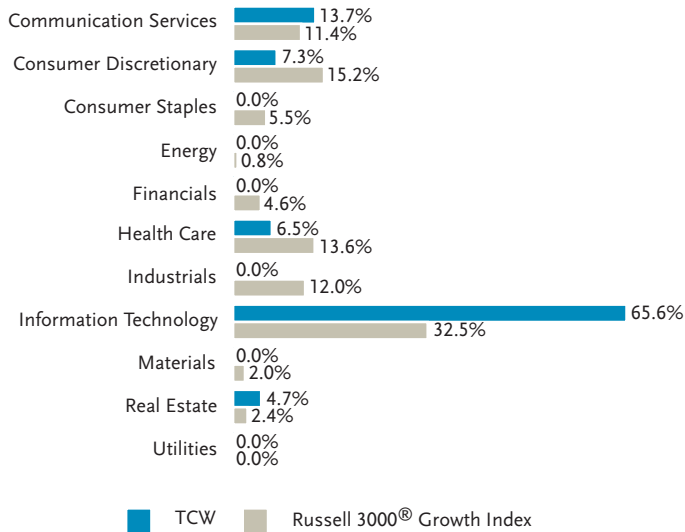
Source: TCW

Please see additional disclosures on the last page, which are an integral and important part of this material. Individual results may vary.

This material is for general information purposes only and does not constitute an offer to sell, or a solicitation of an offer to buy, any security. Any issuers or securities noted in this document are provided as illustrations or examples only, for the limited purpose of analyzing general market or economic conditions and may not form the basis for an investment decision, nor are they intended to serve as investment advice. Any such issuers or securities are under periodic review by the portfolio management group and are subject to change without notice. TCW makes no representation as to whether any security or issuer mentioned in this document is now in any TCW portfolio. TCW, its officers, directors, employees or clients may have positions in securities or investments mentioned in this publication, which are subject to change without notice. Any information and statistical data contained herein derived from third party sources are believed to be reliable, but TCW does not represent that they are accurate, and they should not be relied on as such or be the basis for an investment decision. All information is as of the date of this presentation unless otherwise indicated.

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

Sector Summary



Top Ten Holdings

	% of Portfolio
ServiceNow	4.22
Microsoft	4.12
Autodesk	3.98
Amazon.com	3.98
Splunk	3.75
ASML Holding	3.23
Workday	3.18
Facebook	3.18
Adobe	3.18
Netflix	3.04

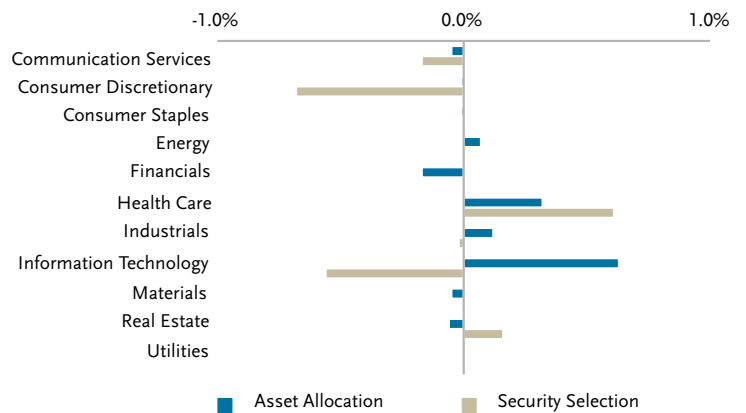
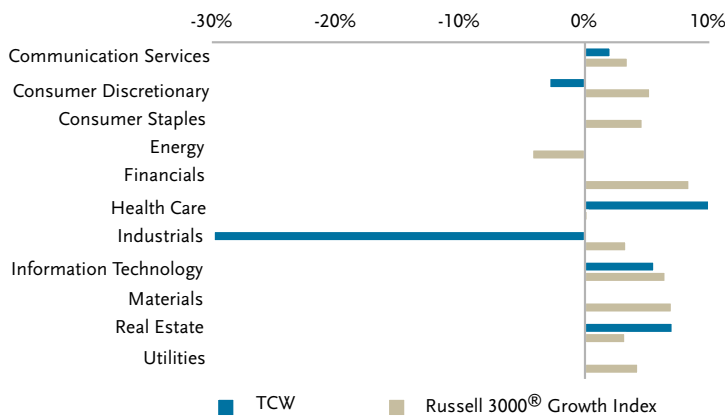
Attribution Analysis Quarter ending June 30, 2019

Sector Return

Sector	TCW GAIE	Russell 3000® Growth Index	Difference
Communication Services	2.06	3.45	-1.39
Consumer Discretionary	-2.87	5.24	-8.11
Consumer Staples	--	4.64	-4.64
Energy	--	-4.25	4.25
Financials	--	8.40	-8.40
Health Care	9.98	0.22	9.76
Industrials	-29.85	3.32	-33.17
Information Technology	5.57	6.48	-0.92
Materials	--	6.99	-6.99
Real Estate	7.05	3.24	3.81
Utilities	--	4.28	-4.28

Sector Attribution

Sector	Asset Allocation	Security Selection	Total
Communication Services	-0.05	-0.17	-0.22
Consumer Discretionary	-0.01	-0.68	-0.69
Consumer Staples	-0.01	--	-0.01
Energy	0.07	--	0.07
Financials	-0.17	--	-0.17
Health Care	0.32	0.61	0.92
Industrials	0.12	-0.02	0.10
Information Technology	0.63	-0.56	0.07
Materials	-0.05	--	-0.05
Real Estate	-0.06	0.16	0.11
Utilities	-0.00	--	-0.00
Total	0.69	-0.66	0.03



Source: TCW, Zephyr, FactSet

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. Please see additional disclosures on the last page, which are an integral and important part of this material. Individual results may vary. Past performance is no guarantee of future results.

Portfolio Characteristics

	TCW Global Artificial Intelligence Equity	Russell 3000® Growth Index
Price/Earnings 1yr EPS Forecast	29.27	20.78
Dividend Yield	0.62%	1.22%
Price/Book Value	8.06	7.26
Price/Sales	6.20	3.18
Price/Cash Flow	22.69	18.11
Debt/Equity	0.83	1.17
Debt/Capital	0.45	0.61
Forecast 1yr EPS Growth	15.09%	12.16%
Market Capitalization (Mil)	\$200,573	\$285,827
Return on Equity	17.95%	27.79%
ROE 5 Year Average	9.77%	21.29%
Annual Turnover	61.81%	N/A
Active Share	73.85%	N/A
Number of Holdings	50	1,774

Regression Statistics (Gross)

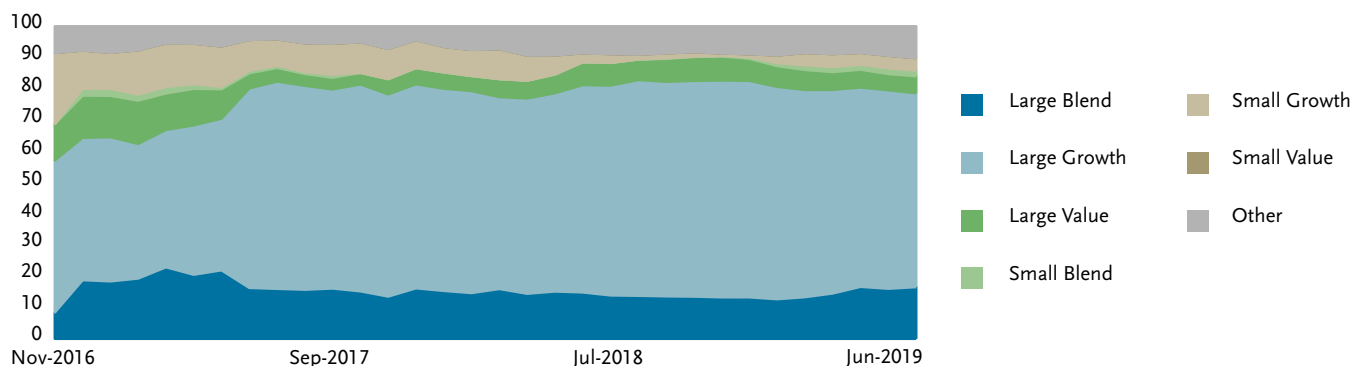
	1 Year		Since 12/1/2016	
	TCW Global Artificial Intelligence Equity	Russell 3000® G. Index	TCW Global Artificial Intelligence Equity	Russell 3000® G. Index
Information Ratio	-0.67	-	0.60	-
Alpha	-4.07%	-	0.96%	-
Beta	1.12	1.00	1.14	1.00
R-Squared	95.47%	100.00%	90.16%	100.00%
Sharpe Ratio	0.18	0.40	1.22	1.22
Standard Deviation	24.10%	20.99%	17.02%	14.15%
Tracking Error	5.73%	-	5.72%	-

Since Inception Statistics (Gross) December 2016 - June 2019

The Up/Down Capture Ratio measures a manager's performance in up and down markets relative to the market (benchmark). It is calculated by taking the managers up/down capture return and dividing it by the benchmark's up/down capture return.

	Up		Down		TCW vs. Index	
	# of Periods	Avg. Monthly Return	# of Periods	Avg. Monthly Return	Up Capture	Down Capture
TCW Global Artificial I.E.	20	4.49%	11	-3.08%	112.00%	100.30%
Russell 3000® Growth Index	26	2.95%	5	-5.91%	100.00%	100.00%

Holdings-Based Style Analysis



Source: TCW, Zephyr, 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.

Portfolio Management

Jeffrey W. Lin, CFA
Portfolio Manager
Managing Director
Equities

Thomas Lee
Portfolio Manager
Managing Director
Equities

The Firm

TCW is a leading global asset management firm with more than four decades of investment experience and a broad range of products across fixed income, equities, emerging markets and alternative investments. Through the TCW and MetWest Fund Families, TCW manages one of the largest mutual fund complexes in the U.S. TCW's clients include many of the world's largest corporate and public pension plans, financial institutions, endowments and foundations, as well as financial advisors and high net worth individuals. As of June 30, 2019, TCW had total assets under management, including commitments, of \$205 billion. TCW is headquartered in Los Angeles, and has offices in New York, Boston, Chicago, London, Milan, Hong Kong, Tokyo, and Sydney.

Index Disclosure

London Stock Exchange Group plc and its group undertakings (collectively, the "LSE Group"). © LSE Group 2018. FTSE Russell is a trading name of certain of the LSE Group companies. Russell® is a trade mark(s) of the relevant LSE Group companies and is/are used by any other LSE Group company under license. All rights in the FTSE Russell indexes or data vest in the relevant LSE Group company which owns the index or the data. Neither LSE Group nor its licensors accept any liability for any errors or omissions in the indexes or data and no party may rely on any indexes or data contained in this communication. No further distribution of data from the LSE Group is permitted without the relevant LSE Group company's express written consent. The LSE Group does not promote, sponsor or endorse the content of this communication.

Performance Disclosure

The TCW Global Artificial Intelligence Equity composite is composed of portfolios whose objective is to outperform the benchmark over the long term by investing in a concentrated portfolio of global securities across the market capitalization spectrum that benefit from rising influence of artificial intelligence in analysis, forecasting, efficiency, automation, consistency and scale. 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 Russell 3000® Growth Index measures the performance of those Russell 3000® Index companies with higher price-to-book ratios and higher forecasted growth values. Returns are calculated in U.S. dollars. Leverage or derivatives are not used in the management of this composite. Returns include the reinvestment of all earnings. Investment directly into an index is not possible. Investments in the strategy will be subject to fees and expenses that will reduce returns.

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

The Marketable Securities Division claims compliance with the Global Investment Performance Standards (GIPS®). To receive a complete list and description of TCW's composites and/or presentation that adheres to the GIPS® standards contact Client Services at 213.244.0000 or contact us by e-mail at PortfolioAnalytics.Group@tcw.com.