

Essex Small Growth Attribution: Bottom 20 Contributors

Summary

Benchmark	RUSSELL 2000 GROWTH IDX (RUO)
Start Date(Earliest Available)	6/29/2012
End Date	6/28/2019
Currency	USD
Method	Total Return

Bottom 20 Attribution Contributors

	% Average Weight			Contribution to Return (%)			Total Return (%)			Total Attribution (Alpha) (%)	Allocation Effect (%)	Selection Effect (%)	Currency Effect (%)	End % Wgt	
	Port	Bench	+/-	Port	Bench	+/-	Port	Bench	+/-						
										133.18					
US DOLLAR	3.21		3.21	0.00		0.00	0.00		0.00		-5.72		-5.72	0.00	3.20
ATLAS FINANCIAL HOLDINGS INC	0.41	0.01	0.40	-2.05	0.00	-2.05	-89.66	-34.59	-55.07		-3.10		-3.10	0.00	
SUNEDISON INC	0.02	0.07	-0.05	-1.48	0.81	-2.28	-71.99	953.92	-1,025.90		-2.72		-2.72	0.00	
ALPHATEC HOLDINGS INC	0.22		0.22	-0.99		-0.99	-72.83		-72.83		-2.65		-2.65	0.00	0.51
ORASURE TECHNOLOGIES INC	0.26	0.04	0.22	-1.53	-0.07	-1.46	-71.16	-62.97	-8.19		-2.55		-2.55	0.00	
NEOS THERAPEUTICS INC	0.17	0.01	0.17	-1.27	-0.04	-1.23	-75.90	-93.86	17.96		-2.48		-2.48	0.00	
ICAD INC	0.12		0.12	-1.31		-1.31	-78.02		-78.02		-2.43		-2.43	0.00	
SUNOPTA INC	0.54		0.54	-1.10		-1.10	-66.64		-66.64		-2.34		-2.34	0.00	0.69
MANITEX INTERNATIONAL INC	1.02	0.01	1.02	-0.21	-0.02	-0.19	-26.38	-60.96	34.58		-2.31		-2.31	0.00	0.73
STRONGBRIDGE BIOPHARMA PLC	0.17	0.00	0.17	-1.51	0.00	-1.51	-61.83	12.73	-74.56		-2.30		-2.30	0.00	0.72
KIRKLAND'S INC	0.28	0.01	0.27	-1.61	-0.03	-1.58	-88.83	-90.05	1.22		-2.30		-2.30	0.00	0.13
HARVARD BIOSCIENCE INC	0.54	0.00	0.54	-1.01	0.00	-1.01	-54.92	-42.68	-12.24		-2.13		-2.13	0.00	0.56
BENEFITFOCUS INC	0.33	0.04	0.29	-0.90	-0.07	-0.83	-47.75	-52.57	4.82		-2.13		-2.13	0.00	0.68
ACACIA RESEARCH CORP	0.16	0.04	0.13	-1.20	-0.22	-0.99	-36.24	-52.40	16.17		-2.04		-2.04	0.00	
LSI INDUSTRIES INC	0.67	0.00	0.67	-0.74	0.00	-0.74	-44.91	-17.34	-27.57		-1.98		-1.98	0.00	0.44
GRUBHUB INC	0.16	0.17	-0.01	-0.54	0.95	-1.49	-28.07	212.81	-240.87		-1.93		-1.93	0.00	
BARRACUDA NETWORKS INC	0.20	0.02	0.18	-1.03	0.03	-1.06	-55.58	7.66	-63.24		-1.92		-1.92	0.00	
CERAGON NETWORKS LTD	0.15		0.15	-1.04		-1.04	-59.72		-59.72		-1.90		-1.90	0.00	
INTEVAC INC	0.29	0.00	0.28	-0.62	-0.02	-0.60	-38.14	-59.17	21.03		-1.85		-1.85	0.00	0.89
DESTINATION XL GROUP INC	0.19	0.00	0.19	-1.08	-0.01	-1.07	-64.10	-53.86	-10.24		-1.84		-1.84	0.00	

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Product & Firm

Period	Gross Return	Net Return	Benchmark Return	Number of Portfolios	Total Composite Assets (USD millions)	Total Firm Assets (USD millions)	Composite Assets as a % of Total Firm Assets	Dispersion	Composite 3-year Standard Deviation	Benchmark 3-year Standard Deviation
2009	32.6 %	31.0 %	34.5 %	19	\$725.0	\$1,930	37.6%	0.2	26.7 %	24.9 %
2010	29.3 %	27.7 %	29.1 %	13	\$620.0	\$1,470	42.2%	0.3	29.7 %	27.7 %
2011	-9.7 %	-10.8 %	-2.9 %	10	\$383.0	\$1,058	36.2%	0.1	24.0 %	24.3 %
2012	14.2 %	12.8 %	14.6 %	≤ 5	\$96.0	\$612	15.7%	-	21.4 %	20.7 %
2013	66.4 %	64.7 %	43.3 %	≤ 5	\$104.0	\$740	14.1%	-	17.8 %	17.3 %
2014	5.3 %	4.3 %	5.6 %	≤ 5	\$80.0	\$683	11.7%	-	14.7 %	13.8 %
2015	-5.0 %	-6.0 %	-1.4 %	≤ 5	\$75.0	\$677	11.1%	-	15.4 %	15.0 %
2016	10.0 %	8.9 %	11.3 %	≤ 5	\$66.0	\$606	10.9 %	-	16.0 %	16.7 %
2017	25.9 %	24.6 %	22.2 %	10	\$132.0	\$765	17.3 %	-	14.7 %	14.6 %
2018	-4.9 %	-5.8 %	-9.3 %	10	\$117.0	\$622	18.8 %	0.3	17.0 %	16.5 %

Essex Investment Management Company, LLC (“Essex”) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Essex has been independently verified for the periods January 1, 1993 through December 31, 2018. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm’s policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Small Growth composite has been examined for the periods October 1, 2000 through December 31, 2018. The verification and performance examination reports are available upon request.

Notes:

1. Organization: Essex Investment Management Company, LLC (“Essex”) is an independently owned investment management firm founded in 1976. Essex is a registered investment adviser with the SEC. The firm offers investment management services to individuals, institutional investors, separately managed sub-advisory account programs, and sub-advisory management services to mutual funds. When used herein, the term Essex also refers to the firm’s predecessor, Essex Investment Management Company, Inc. On January 1, 2005, the BurrIDGE Growth Partners division of the former The BurrIDGE Group LLC merged with Essex. BurrIDGE Growth Partners’ portfolio manager, analysts and investment decision making process remained intact and its separately managed accounts continued under Essex’s management.

2. Composite Definition: This composite includes all fully discretionary accounts managed by Essex to seek capital appreciation by investing in small/micro capitalization growth companies. For the period 10/1/2000 – 12/31/2001, the only accounts in the composite were non-fee paying accounts. The use of leveraging, short positions and derivatives has not been used by any of the accounts. The composite was created on October 1, 2000. Performance results from October 1, 2000 (the composite’s inception) through January 1, 2005 are that of the Small Cap composite managed by Nancy Prial while she was Chief Investment Officer and the key decision maker of BurrIDGE Growth Partners. The investment composition of the composite strategy remained intact with the merger only the name of the composite has changed. Performance results for years prior to 2005 were achieved while the managers of the investment strategy were employed with The BurrIDGE Group LLC. Therefore, Total Firm Assets prior to 2005 are shown as N/A because the firm no longer exists and only a portion of assets with BurrIDGE transferred to Essex. All portability requirements with respect to the GIPS® have been met. On 1/1/15 the composite name changed from Small/Micro Cap to Small Growth.

3. Benchmark: The Russell 2000® Growth Index contains those securities in the Russell 2000 Index with a greater-than average growth orientation, and includes reinvestment of dividends. The Russell 2000® Growth Index is a trademark of Russell Investments. Russell Investments is the owner of the trademarks, service marks and copyrights related to its respective indexes. An index is unmanaged, does not incur fees or expenses, and cannot be invested in directly. Benchmark returns are not covered by the report of independent verifiers.

4. Dispersion & Standard Deviation: Essex uses an asset-weighted standard deviation calculation to measure dispersion. Only portfolios that are included in the composite for the entire year have been included in the dispersion calculation; it is not presented for periods less than one year or when there are five or fewer portfolios in the composite. The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceeding 36 month period.

Additional disclosures are continued on page 19.

Past performance is not indicative of future returns.

Additional

5. Fees: The standard advisory fee is: For all accredited investor accounts 1.0% on all assets. Essex's standard advisory fee schedules are described in its Part II of Form ADV. The above net returns are based on a model 1.0% advisory fee which is applied monthly to calculate the net performance numbers.

6. Calculation Methodology: Gross performance results presented are net of transaction costs, but before management fees, custody fees and other indirect expenses. Net performance results are presented net of the maximum applicable management fees, transaction costs, withholding taxes and direct expenses, but before custody fees and other indirect expenses. This composite does not incur any performance-based fees. Composite returns include the reinvestment of income and class actions proceeds, if applicable. Actual returns will be reduced by investment advisory fees and any additional fees and expenses. Investment advisory fees are generally collected quarterly, which produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment advisory fees on the total value of a client's portfolio assuming \$1,000,000 investment, portfolio return of 10% a year, and a 1.0% annual investment advisory fee would be \$10,577 in the first year, and cumulative effects of \$63,180 over five years. The five year compounded gross rate of return of 61.1% would be reduced to 53.2% after taking into account advisory fees. The actual fee charged to an individual account may differ from the standard schedule depending on a number of factors including account type and size.

7. Composite Characteristics: The minimum value threshold used to be \$1,000,000. The minimum value threshold is no longer in place as of 10/1/2012.

8. Other Matters/Disclosures: A complete list and description of the firm's composites are available upon request. Additional information regarding the firm's policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. Clients or prospective clients should not assume they will have an investment experience similar to that indicated by the past performance results of the composite. Valuations and returns are computed and stated in U.S. Dollars. Past composite performance is not necessarily predictive of how an investors' individual account will perform. Whenever the potential for profit exists, there is also the potential for loss. This document has been approved for use in one-on-one presentations only and Essex requires that third party consultants provide this performance information and the related disclosures only in one-on-one presentations. Registration as an investment adviser with the SEC does not imply a certain level of skill or training. Such registration in no way implies that the Securities and Exchange Commission approves or endorses Essex, its strategies, or any of its marketing materials.

IMPORTANT:

Risks of Small Growth portfolios: Essex Small Growth portfolio returns may show a high level of variability and volatility. In addition to market risk, additional risks in these portfolios may result from Essex's selection of specific securities, since individual holdings may represent a significant percentage of a portfolio's holdings from time to time. Sources: portfolio characteristics, top ten holdings, and sector weights calculated internally by Essex. Performance Calculations: performance returns are of the Essex Small Growth Composite, inception 10/1/00. Returns include reinvestment of dividends and other earnings. The Essex Small Growth Composite includes all fully discretionary accounts managed by Essex to seek capital appreciation by investing in small/micro capitalization growth companies. The use of leveraging, short positions and derivatives has not been used by any of the accounts. The Russell 2000 Growth Index[®] contains those securities with a greater-than average growth orientation, and includes reinvestment of dividends. The Russell 2000 Growth Index[®] measures the performance of those companies with higher price-to-book ratios and higher forecasted growth values. The Russell 2000 Growth Index[®] is a trademark of Russell Investments. Russell Investments is the owner of the trademarks, service marks and copyrights related to its respective indexes. The volatility of the indices may be materially different from the individual performance attained by a specific investor. In addition, the Adviser's/Fund's holdings may differ significantly from the securities that comprise the indices. The indices have not been selected to represent an appropriate benchmark to compare an investor's performance, but rather are disclosed to allow for comparison of an investor's performance to that of certain well-known and widely recognized indices. An index is unmanaged, does not incur fees or expenses, and cannot be invested in directly. index is unmanaged, does not incur fees or expenses, and cannot be invested in directly. Composite returns include the reinvestment of dividends and are presented in USD. Gross performance results presented are net of transaction costs, withholding taxes and direct expenses, but before management fees, custody fees and other indirect expenses. Net performance results are presented net of the maximum applicable management fees, transaction costs, withholding taxes and direct expenses, but before custody fees and other indirect expenses. This composite does not incur any performance-based fees. Actual returns will be reduced by investment advisory fees and any other additional fees and expenses. Essex's standard fee schedule is available on request and can be found in Part 2A of our Form ADV. Investment advisory fees are generally collected quarterly, which produces a compounding effect on the total rate of return net of management fees. The actual fee charged to an individual account may differ from the standard schedule depending on a number of factors including account type and size. Past composite performance is not necessarily predictive of how an investors' individual account will perform. Wherever the potential for profit exists, there is also a potential for loss.

Performance Disclosures:

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Past performance is not indicative of future returns.