



# Is Your Index Fooling You?

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May 2017

For disclosures and other important information, please see the back of this report



#### When index performance is strong

Interest in indexing has perked up again, as tends to occur when the equity index outperforms most managers-- placing in the top half of the peer group universe. For a Trustee or Investment Committee member, this is a pain point, and indexing the portfolio seems like a good idea.

Most institutional investors and consultants believe that an index represents a stable, unmanaged, passive bucket of stocks sharing similar attributes, for example size—large cap, and style—value. There is no shortage of indices geared to a particular set of attributes and one can drill down with increasing granularity: high dividend payers, low volatility or Malaysian consumer services midcap value, for example.

In this paper, I will attempt to show that far from being a stalwart representation of collective characteristics, that indices' performance can drift over time, sometimes going as far as to deliver contrary performance characteristics, and that active managers can deliver desirable outcomes that indexing cannot.

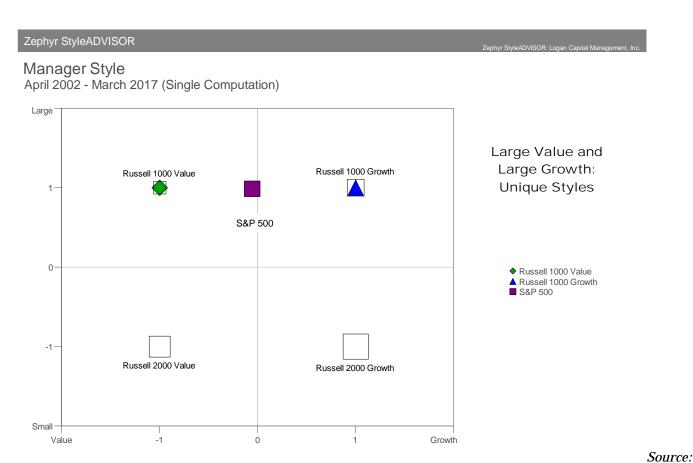
For purposes of this discussion, we will use the Russell 1000 Value and Russell 1000 Growth indices, two widely used large cap value and growth benchmarks.



#### What you think vs. what you get

It is fair to say that most institutional investors ("investors") and consultants expect the index to be a consistent benchmark against which to measure, as they evaluate whether the active managers selected to invest the plan's assets have delivered added value that is commensurate with the increased costs of using an active manager. Added value is not always synonymous simply with higher return; it could be lower variability of returns, higher Sharpe Ratio or lessened drawdowns.

The following graph is a visual representation of how investors and consultants view the Russell 1000 Value and Russell 1000 Growth Indices: as opposite poles on the value to growth continuum and unique in the characteristics they bring to the investing table. The S&P 500 is just about in the middle between the two "extremes", which is consistent with viewing that benchmark as representative of the large cap market in its entirety.



Zephyr StyleADVISOR

Figure 1



The following graph shows the Russell 1000 Value ("R1000V") and Russell 1000 Growth ("R1000G") indices plotted against the Russell 1000 Defensive and Dynamic Indices, which were designed by Russell to exemplify 'another (independent) dimension of performance different from size or value/growth'. The graph shows a single data point spanning the time period from August 1996 (the inception of the dataset for the 'dynamic/defensive' duo), up through September 2007, an interesting date in investment history.

In this analysis, the benchmarks seem true to style based on this particular evaluation palette: one would expect "value" stocks to be more defensive and "growth" stocks to deliver more 'dynamic' results.

## This is what you think

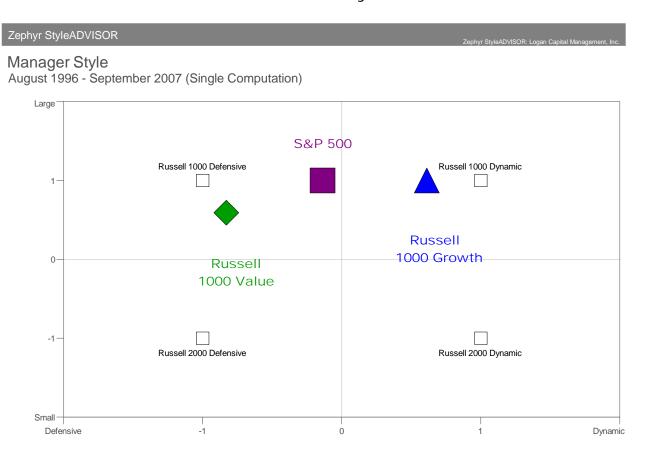


Figure 2



The surprise comes when the performance styles of these "polar complements" are viewed over rolling time periods against these benchmarks.

The following graph shows the Russell 1000 Value and Russell 1000 Growth indices measured against the 'Defensive/Dynamic' palette on a rolling 36 month basis, updated through March 2017. In this rendition of rolling returns, it becomes evident that there has been significant style drift by both benchmarks so that the benchmarks more recently are delivering overlapping characteristics. (The shapes increase in size over time.)

## This is what you get

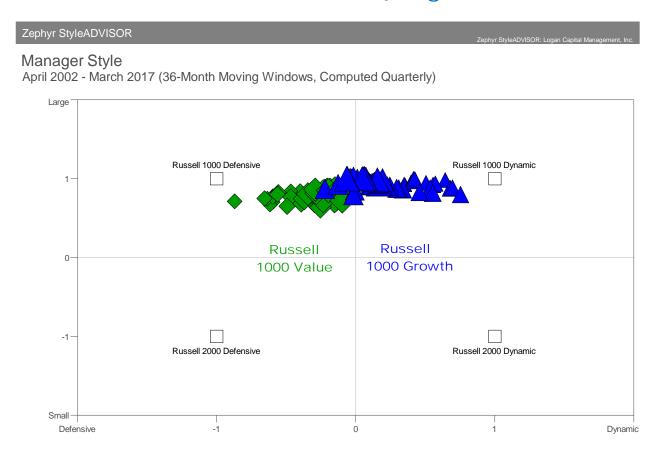


Figure 3



Furthermore, the next graph shows that the S&P 500, R1000V and R1000G delivered annualized returns just 26 basis points apart, with volatility (standard deviation of returns) between 14.3% and 14.9% in the 15-year period that ended on March 31, 2017.

#### They all look the Same

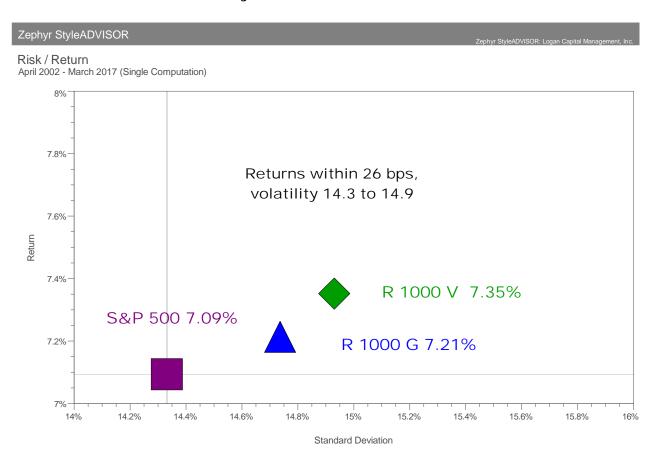


Figure 4



#### So, how do you get the exposure that you need?

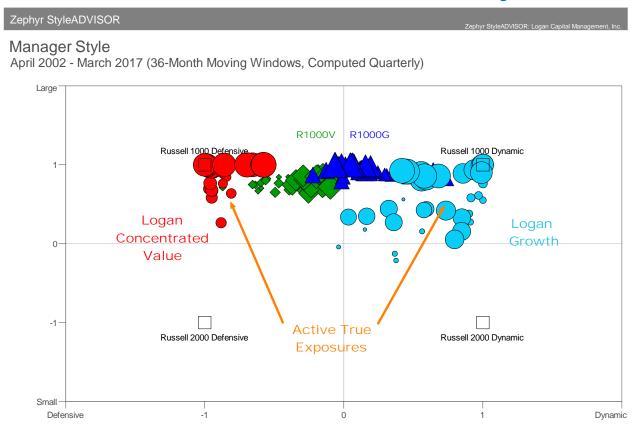
Active management can provide the diversification and consistency that a plan sponsor needs to actively express their views about the investment emphasis that they have determined best meets the plan's formal investment objectives and goals.

It is arguably easier to meet investment objectives using a range of investment styles that remain consistent over time, than to chance investing in strategies whose results drift over time, and therefore may have unintended consequences.

Logan Capital Management's value proposition is to deliver consistent, discrete portfolios geared to a single investment style (which also may be blended to deliver customized characteristics). The graph below shows the graph we saw earlier in Figure 3, updated to include Logan Capital's Concentrated Value and Growth strategies.

## Active managers can deliver

## diversification and consistency\*





#### Figure 5

\* Information is supplemental to a fully GIPS compliant presentation. Past performance is no guarantee of future results. Gross of fee returns have been reduced by all actual trading expenses, but not investment advisory fee. Please see the Logan Large Concentrated Value Composite and Logan Growth Composite Performance Disclosures, and Important Information pages at the end of this presentation



## Active management can add value over longer time periods

The following series of graphs illustrates the Russell 1000 Value, Russell 1000 Growth and S&P 500 results over the 15 years ended March 31, 2017 plotted in the PSN Large Cap Core Universe, using the 5<sup>th</sup> and 95<sup>th</sup> percentile cutoffs.

The first graph shows that active management can increase return. This graph shows the ranges of returns delivered by the peer group. Over that time period, some active managers added an annualized 2.5% (approximately) over the S&P 500's return when, as we saw in Figure 4, the R1000V and R1000G performed in line with the S&P 500. The orange line spans the interval of returns higher than the S&P's.

## Active management can improve return

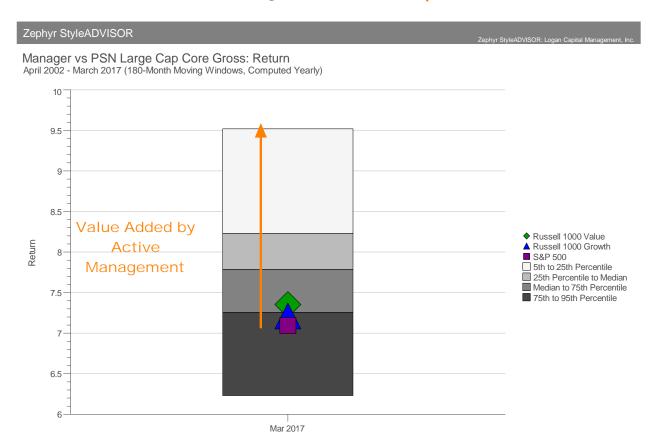
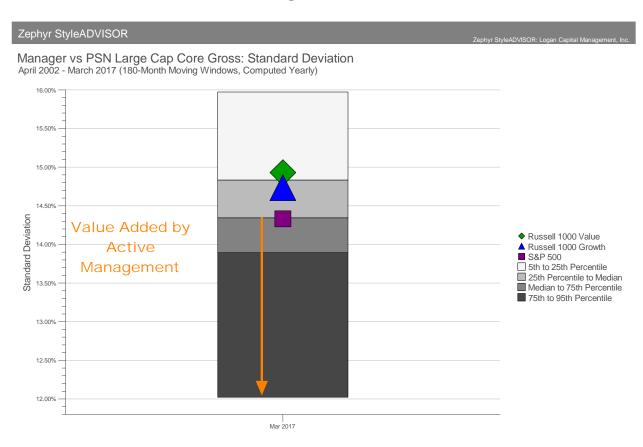


Figure 6



The next graph shows that it was possible to significantly decrease volatility (standard deviation) by using active managers, from 14.3% for the S&P 500 to a possible 12%.

## Active management can lower risk\*



Source: Zephyr StyleADVISOR \*Standard deviation

Figure 7



The third data point is the maximum drawdown over the time period, which was significantly dampened to 39% compared to the S&P 500's drawdown of 51%, which is a drawdown 'savings' of 12 full percentage points.

## Active management can dampen drawdown

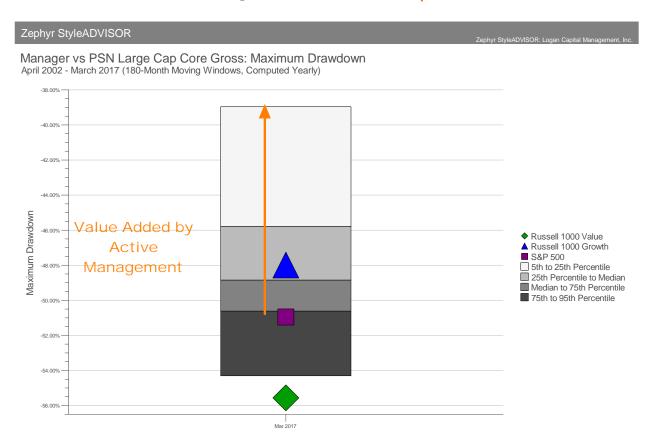
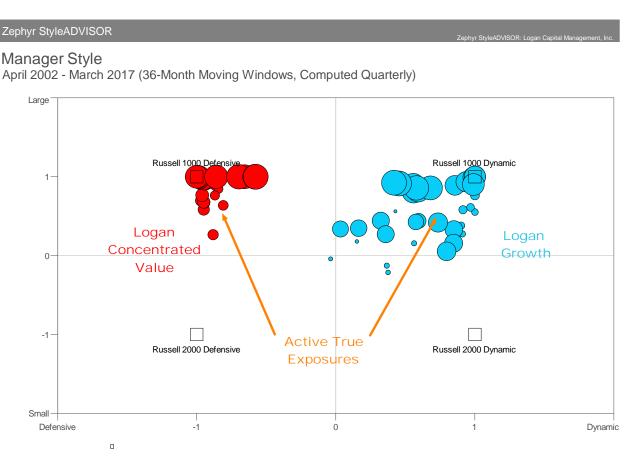


Figure 8



Finally, we see that Logan's strategies offered more consistent exposure over this timeframe, which potentially enables a plan sponsor to effectively implement an active tilt, or bias, with much less style drift than the passive benchmarks.

## Active managers can deliver the required exposure\*



Source: Zephyr StyleADVISOR

Figure 9

In summary, with active management it is possible to improve return, lower volatility, dampen drawdown and get the exposure you need.

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#### "The Grand Real Life Experiment"

Logan's strategies, which have a good record delivering consistent characteristics over time, lend themselves to creating portfolios with tailored attributes. For this exercise we compared an active mix--our Core 50% large cap growth/50% large cap value mix, which has been managed on behalf of clients since April 2002, with a passive mix--50% R1000G/50% R1000V mix rebalanced annually. (*Our Core strategy is rebalanced semi- annually*.)

## "The Grand Real Life Experiment"

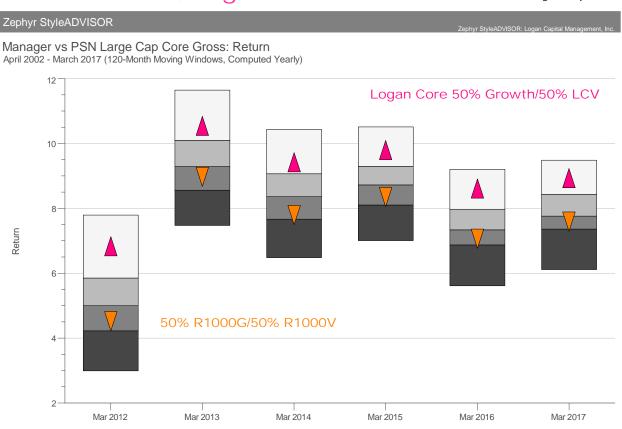




#### **Results**

**Return:** The results are shown in the graph below, with both strategies plotted in the PSN Large Core Universe, showing returns over the six rolling 10 year periods that can be derived from the data.

Active blend, Logan Core vs Passive blend 10 year periods



Source: Zephyr StyleADVISOR

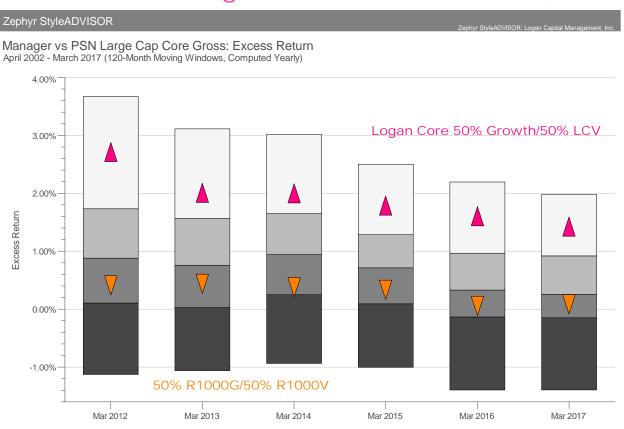
Figure 10

Information is supplemental to a fully GIPS compliant presentation. Past performance is no guarantee of future results. Gross of fee returns have been reduced by all actual trading expenses, but not investment advisory fee. Please see the Logan Core 50/50 composite Performance Disclosures and Important Information pages at the end of this presentation.



**Excess Return:** The next graph shows meaningful excess returns (1.4% to 2.7%) delivered by Logan Core over 10 year periods, while the blended indices portfolio ekes out between 0.06% and 0.44% over the S&P 500.

## Active blend, Logan Core vs Passive blend 10 year periods



Source: Zephyr StyleADVISOR

Figure 11

Information is supplemental to a fully GIPS compliant presentation. Past performance is no guarantee of future results. Gross of fee returns have been reduced by all actual trading expenses, but not investment advisory fee. Please see the Logan Core 50/50 composite Performance Disclosures and Important Information pages at the end of this presentation



**Alpha:** The active strategy also delivered Alpha that ranged from 1.6% to 2.8%, owing to outperforming the S&P 500 with a lower beta.

# Active blend, Logan Core vs Passive blend 10 year periods



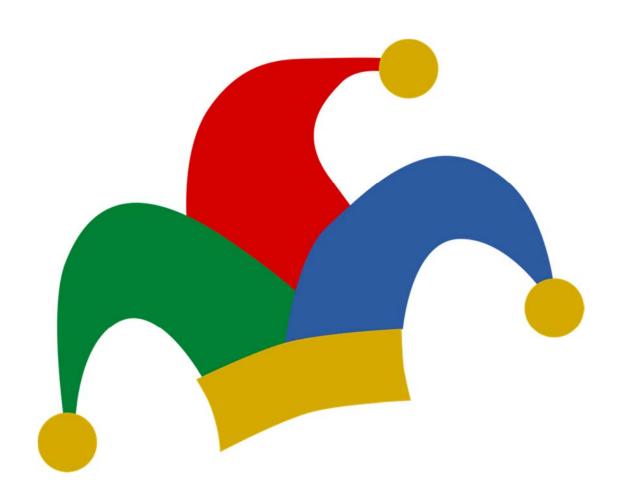
Source: Zephyr StyleADVISOR

Figure 12

Standard deviation and maximum drawdown were slightly improved by utilizing the active portfolio, confirming that the live Core strategy delivered better results without undertaking more risk.

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So don't be fooled.



#### **Disclosures**

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All information, including that used to compile graphs and performance and risk metrics, is obtained from sources believed to be reliable, but Logan does not guarantee its reliability. Logan's investments may consist of securities which vary significantly from those in the benchmark indexes. Logan's performance results have been compiled by Logan Capital Management. Performance for the Logan Core strategy is that of the Logan Core 50/50 Wrap Composite presented gross of fees. Net of fees performance for the Core Composite is shown on the Performance Disclosures page XX, however the fees deducted do not represent Logan Capital's fees, but rather fees paid by the clients to their Financial Advisor for services that may include such services as financial advice. As such, net of fees performance would not be indicative of the performance expected by a client hiring Logan Capital Management directly.

Logan's risk metrics have been calculated by Zephyr StyleADVISOR. Russell 1000 Growth, Russell 1000 Value and S&P 500 performance results and risk measures are calculated by Zephyr StyleADVISOR. The PSN Large Cap Core Universe illustrated in the graphs is obtained through Zephyr StyleADVISOR. Logan believes Zephyr StyleADVISOR to be a reliable source, but Logan does not guaranty its reliability.

The performance benchmark used for the Growth strategy is the Russell 1000 Growth Index, for the Concentrated Value strategy is the Russell 1000 Value Index and for the Core strategy, is the S&P 500 Index. Indexes are unmanaged and have no fees or expenses. An investment cannot be made directly in an index.

There is no guarantee the Growth, LCV and Core strategies portfolio investments will meet their objectives. This is not a guarantee or indication of future performance. References to the Russell 1000 Growth, Russell 1000 Value and S&P 500 indices herein are for informational and general comparative purposes only. Investment strategies with other securities may vary significantly from those in the benchmark indexes listed. All investments involve the risk of potential investment losses as well as the potential for investment gains. Prior performance is no guarantee of future results and there can be no assurance that future performance will be comparable to past performance.

Gross performance results do not reflect the deduction of investment advisory fees, which would reduce an investor's actual return. For example, assume that \$1 million is invested in an account with the Firm, and this account achieves a 10% compounded annualized return, gross of fees, for five years. At the end of five years that account would grow to \$1,610,510 before the deduction of management fees. Assuming management fees of 1.00% per year are deducted monthly from the account, the value of the account at the end of five years would be \$1,532,886 and the annualized rate of return would be 8.92%. For a ten-year period, the ending dollar values before and after fees would be \$2,593,742 and \$2,349,739, respectively.

The securities discussed herein should not be perceived as a recommendation to purchase or sell any particular security. There is no assurance that any securities discussed herein will remain in an account's portfolio at the time you receive this report, or that securities sold have not been repurchased. The securities discussed do not represent an account's entire portfolio and in aggregate may only represent a small percentage of an account's portfolio holdings. It should not be assumed that investments in any of the securities listed were or will prove



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Logan Capital Management, Inc. ("Logan") is an independent Investment Advisor headquartered in Ardmore, PA, registered with the U.S. Securities and Exchange Commission under the Investment Advisers Act or 1940. Being an SEC-registered advisor implies no special qualification or training. Logan offers and manages its Growth, Concentrated Value ("LCV") and Core strategies to institutions, individuals and other advisory firms.

Individual portfolios utilizing the Logan Growth, LCV and Core strategies product offerings may have different performance results than the composite results shown in this paper.

Logan Capital Management, Inc. claims compliance with the Global Investment Performance Standards (GIPS) and has prepared and presented this report in compliance with GIPS standard. Logan Capital Management, Inc.'s compliance with GIPS standards has been verified for the period April 1, 1994 through December 31, 2016 by Ashland Partners & Company LLP. A copy of the verification report is available upon request.

To receive copies of the verification reports or additional information regarding Logan's policies and procedures for calculating and reporting performance results, please email <a href="mailto:ClientServices@LoganCapital.com">ClientServices@LoganCapital.com</a> or call 215.569.1100.



## **Definitions**

**PSN Large Cap Core Universe**: For the 10 years ended March 31, 2017, this universe represents 262 separate portfolios.

**S&P 500**: A market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends.

**Russell 1000 Growth:** An index composed of large-and mid-capitalization U.S. equities that exhibit growth characteristics.

Russell 1000 Value: An index composed of large- and mid-capitalization U.S. equities that exhibit value characteristics.

**Russell 2000 Growth:** An index composed of small capitalization U.S. equities that exhibit growth characteristics.

Russell 2000 Value: An index composed of small capitalization U.S. equities that exhibit value characteristics.

Russell Defensive Indexes: Measures the performance of companies that have relatively stable business conditions which are less sensitive to economic cycles, credit cycles and market volatility based on their stability indicators.

Russell Dynamic Indexes: Measures the performance of companies that have relatively less stable business conditions and are more sensitive to market cycles.



Since Inception†

8.5%

9.4%

8.8%

Logan Capital Management, Inc.

Performance Results: Logan Growth Composite
April 1, 1995 through March 31, 2017

						Composite	-, -, -, -									
	Total Return	Total Return	Russell			Dispersion	Composite 3-	Russell 1000	S&P 500	Composite 3-	Assets in					irm +
	Net of Fees	Gross of	1000	S&P 500	Number of	Gross of Fees	Yr Std Dev	Growth 3-Yr	3-Yr Std	Yr Sharpe	Composite	% of Firm	Firm Assets	UMA Assets	- 1	UMA
Year	(%)	Fees (%)	Growth (%)	(%)	Accounts	(%)	(%)	Std Dev (%)	Dev (%)	Ratio	(\$millions)	Assets	(\$millions)	(\$millions) ^ *	As	ssets ^
YTD 2017	10.1%	10.3%	8.9%	6.1%	22	N.M.	12.2%	10.9%	10.3%	0.8	\$15.4	1.1%	\$1,456	\$ 183	} \$	1,639
2016	2.6%	3.4%	7.1%	12.0%	22	0.3%	12.9%	11.2%	10.6%	0.5	\$13.9	1.0%	\$1,401	\$ 173	} \$	1,574
2015	2.8%	3.6%	5.7%	1.4%	25	0.4%	11.7%	10.7%	10.5%	1.4	\$12.2	0.9%	\$1,398	\$ 207	/ \$	1,605
2014	12.1%	13.0%	13.0%	13.7%	28	0.4%	12.1%	9.6%	9.0%	1.7	\$12.5	0.7%	\$1,816	\$ 229	} \$	2,045
2013	35.4%	36.6%	33.5%	32.4%	27	0.8%	15.4%	12.2%	11.9%	1.0	\$12.4	0.6%	\$2,061	\$ 115	j \$	2,176
2012	12.3%	13.3%	15.3%	16.0%	24	0.9%	19.6%	15.7%	15.1%	0.8	\$8.5	0.4%	\$1,932	\$ 82	2 \$	2,014
2011	-1.9%	-1.0%	2.6%	2.1%	26	0.6%	21.3%	17.8%	18.7%	1.2	\$9.5	0.5%	\$1,873	\$ 21	1 \$	1,894
2010	35.4%	36.5%	16.7%	15.1%	24	0.8%	27.4%	22.1%	21.9%	0.0	\$12.8	0.7%	\$1,769	\$ 13	} \$	1,782
2009	42.3%	43.4%	37.2%	26.5%	18	1.4%	24.7%	19.7%	19.6%	-0.2	\$7.1	0.5%	\$1,539	\$ -	\$	1,539
2008	-50.1%	-49.6%	-38.4%	-37.0%	20	0.7%	21.5%	16.4%	15.1%	-0.7	\$4.0	0.3%	\$1,240	\$ -	\$	1,240
2007	23.1%	24.0%	11.8%	5.5%	32	1.4%	11.4%	8.5%	7.7%	0.8	\$14.2	0.9%	\$1,658	\$ -	\$	1,658
	Annualized Ret	urns (as of 03	3/31/17)		† Inception of 3/31/95											
1 Year	14.5%	15.4%	15.8%	17.2%	N.M Informa	tion is not statistic	ally meaningful	due to an insuffi	cient numbe	er of portfolios in	the composite f	for the entire	year.			
3 Years	9.4%	10.2%	11.3%	10.4%	^*UMA Assets	as of 02/28/17										
5 Vaare	11 10/	12 1%	12 20/	12 20/	Alufamu ation i		. f. ll., CIDC									

3 Years 9.4% 10.2% 11.3% 10.4% ^\*UMA Assets as of 02/28/17
5 Years 11.1% 12.1% 13.3% 13.3% 'Afformation is supplemental to a fully GIPS compliant presentation 10 Years 5.6% 6.4% 5.2% 5.8% 5.8%

9 4%

Logan Growth Composite contains fully discretionary mid to large cap growth equity accounts, measured against the Russell 1000 Growth benchmark and the S&P 500. You cannot invest directly in an index. The Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. It has been constructed to provide a comprehensive and unbiased barometer for the large-cap growth segment. The S&P 500 Index seeks to reflect the risk and return of all large cap companies and is also is used as a proxy for all of the total stock market. It tracks the 500 most widely held stocks on the NYSE or NASDAQ and is widely regarded as the best single gauge of large-cap U.S. equities. The benchmarks selected include the reinvestment of dividends and income, but do not reflect fees, brokerage commissions, withholding taxes, or other expenses of investing. These benchmarks are used for comparative purposes only and generally reflect the risk and investment style of the composite.

The strategy invests in US securities with a market capitalization over \$1 billion at time of purchase. A small portion of the strategy (<10%) can be invest in ADR's and Canadian common shares. Turnover is low, typically under 35% and holdings range between 30 and 40 positions. Only accounts paying commission fees are included. The minimum account size for this composite is \$100 thousand; prior to March 31, 2003 the minimum account size was \$300 thousand.

Logan Capital Management, Inc. claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Logan Capital Management, Inc. has been independently verified for the periods April 1, 1994 through September 30, 2016 by Ashland Partners & Company LLP. A copy of the verification report(s) is/are available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite disclosure presentation.

Logan Capital Management, Inc. is a privately owned Pennsylvania-based investment adviser registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940. Registration as an investment adviser does not imply a certain level of skill or training. The verbal and written communications of an investment adviser provide you with information you need to determine whether to hire or retain the adviser. The firm maintains a complete list and description of composites, which is available upon request.

Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Past performance is not indicative of future results.

The U.S. Dollar is the currency used to express performance. Returns are presented gross and net of management fees and include the reinvestment of all income. Gross of fee returns do not reflect the deduction of investment advisory fees. Gross of fee



returns have, however, been reduced by all actual trading expenses. Net of fee returns are calculated net of actual investment management fees & actual trading expenses. The annual composite dispersion presented is an asset-weighted standard deviation calculated for the accounts in the composite the entire year. Additional information regarding the policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The investment management fee schedule for accounts over \$10 million is as follows: 80 basis points on the first \$25 million, 70 basis points on the next \$25 million, 50 basis points on the next \$25 million and 45 basis points on the \$25 million thereafter. The investment advisory fees charged for accounts whose market value exceeds \$100 million are negotiable. Accounts under \$10 million will be charged a flat 1.00% per annum. Actual investment advisory fees incurred by clients may vary.

The Logan Growth Composite was created April 1, 1995.



9.7%

Since Inception†

8.1%

9.0%

Logan Capital Management, Inc. Performance Results: LCV Composite January 1, 1996 through March 31, 2017

						Composite										
	Total	<b>Total Return</b>		Russell	Number	Dispersion	Composite	Russell 200	Russell 1000	Composite 3-	Assets in	% of			Fi	rm +
	Return Net	Gross of	Russell 200	1000 Value	of	Gross of	3-Yr Std	Value 3-Yr	Value 3-Yr	Yr Sharpe	Composite	Firm	Firm Assets	UMA Assets	ι	JMA
Year	of Fees (%)	Fees (%)	Value (%)	(%)	Accounts	Fees (%)	Dev (%)	Std Dev (%)	Std Dev (%)	Ratio	(\$millions)	Assets	(\$millions)	(\$millions) ^ *	As	sets ^
 YTD 2017	1.6%	1.8%	3.1%	3.3%	49	N.M.	12.0%	10.4%	8.7%	0.8	\$17.7	1.2%	\$1,456	\$ 183	\$	1,639
2016	17.8%	18.8%	16.2%	17.3%	52	0.3%	12.5%	10.9%	10.8%	0.8	\$18.2	1.3%	\$1,401	\$ 173	\$	1,574
2015	3.9%	4.7%	-3.4%	-3.8%	52	0.2%	11.9%	10.6%	10.7%	0.9	\$16.9	1.2%	\$1,398	\$ 207	\$	1,605
2014	4.9%	5.7%	12.9%	13.5%	49	0.4%	9.3%	9.2%	9.2%	1.4	\$14.6	0.8%	\$1,816	\$ 229	\$	2,045
2013	22.3%	23.3%	32.1%	32.5%	52	0.3%	9.8%	12.4%	12.7%	1.8	\$17.7	0.9%	\$2,061	\$ 115	\$	2,176
2012	8.4%	9.2%	17.0%	17.5%	47	0.4%	12.6%	15.1%	15.5%	1.1	\$9.7	0.5%	\$1,932	\$ 82	\$	2,014
2011	18.7%	19.7%	1.1%	0.4%	46	0.3%	18.2%	20.1%	20.7%	0.8	\$11.0	0.6%	\$1,873	\$ 21	\$	1,894
2010	12.5%	13.5%	11.7%	15.5%	30	0.4%	19.8%	22.0%	23.2%	-0.1	\$5.8	0.3%	\$1,769	\$ 13	\$	1,782
2009	8.5%	9.5%	14.6%	19.7%	23	0.3%	17.9%	20.1%	21.1%	-0.4	\$6.0	0.4%	\$1,539	\$ -	\$	1,539
2008	-22.9%	-22.3%	-36.1%	-36.8%	24	0.6%	11.7%	14.5%	15.4%	-0.4	\$6.3	0.5%	\$1,240	\$ -	\$	1,240
2007	-0.6%	0.3%	0.2%	-0.2%	34	0.3%	7.3%	8.1%	8.1%	0.5	\$10.8	0.7%	\$1,658	\$ -	\$	1,658
ı	Annualized Re	eturns (as of 0	3/31/17)		† Inception of	of 12/31/95										
1 Year	14.0%	15.0%	19.0%	19.2%	N.M Infor	mation is not si	tatistically me	aningful due to	an insufficient n	umber of portfoli	os in the compo	site for the	entire year.			
3 Years	8.9%	9.9%	8.6%	8.7%	^*UMA Asse	ets as of 02/28/	17									
5 Years	10.2%	11.1%	12.7%	13.1%	^Information	n is supplement	tal to a fully G	IPS compliant	presentation							
10 Years	6.9%	7.7%	5.3%	5.9%												

<u>Logan Concentrated Value (LCV) Composite</u> contains fully discretionary large cap value equity accounts, measured against the Russell 1000 Value and Russell 200 Value benchmarks. You cannot invest directly in an index. The Russell 1000 Value Index is an unmanaged index that measures the performance of those Russell 1000 Index companies with lower price-to-book ratios and lower forecasted growth rates. The Russell 200 Value Index is an unmanaged index that measures the performance of the largest 200 companies within the Russell 3000 Index with a less-than-average growth orientation. The benchmarks selected include the reinvestment of dividends and income, but do not reflect fees, brokerage commissions, withholding taxes, or other expenses of investing. These benchmarks are used for comparative purposes only and generally reflect the risk and investment style of the composite.

The strategy invests in 10-12 very large cap stocks with strong balance sheets, strong cash flows and relatively high dividend yields. ADR's may be included in the portfolio (generally less than 20%). Turnover is typically 30-50% annually. Only accounts paying commission fees are included. As of September 30, 2014 the minimum account size for the composite is \$75,000. Prior to this date there was no minimum account size.

Logan Capital Management, Inc. claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Logan Capital Management, Inc. has been independently verified for the periods April 1, 1994 through September 30, 2016 by Ashland Partners & Company LLP. A copy of the verification report(s) is/are available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite disclosure presentation.

Logan Capital Management, Inc. is a privately owned Pennsylvania-based investment adviser registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940. Registration as an investment adviser does not imply a certain level of skill or training. The verbal and written communications of an investment adviser provide you with information you need to determine whether to hire or retain the adviser. The firm maintains a complete list and description of composites, which is available upon request.

The U.S. Dollar is the currency used to express performance. Returns are presented gross and net of management fees and include the reinvestment of all income. Gross of fee returns do not reflect the deduction of investment advisory fees. Gross of fee returns have, however, been reduced by all actual trading expenses. Net of fee returns are calculated net of actual investment management fees & actual trading expenses. The annual composite dispersion presented is an asset-weighted standard deviation calculated for the accounts in the composite the entire year. Additional information regarding the policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.



Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Past performance is not indicative of future results.

The investment management fee schedule for accounts over \$10 million is as follows: 80 basis points on the first \$25 million, 70 basis points on the next \$25 million, 50 basis points on the next \$25 million and 45 basis points on the \$25 million thereafter. The investment advisory fees charged for accounts whose market value exceeds \$100 million are negotiable. Accounts under \$10 million will be charged a flat 1.00% per annum. Actual investment advisory fees incurred by clients may vary.

The Logan Concentrated Value (LCV) Commission Composite was created August 1, 2000. Performance presented prior to August 1, 2000 represents that of Berwind Investment Management, L.P.



Logan Capital Management, Inc.
Performance Results: Logan Core 50/50

	Composite Total Return Net of Fees	Composite Total Return Pure Gross of	S&P 500	Russell	Composite Dispersion Gross of Fees	Composite 3- Yr Std Dev	S&P 500 3- Yr Std	Russell 1000 3-Yr Std Dev	Composite 3- Yr Sharpe	Number of	Wrap Assets in Composite	Total Assets in Composite	Total Assets as a		UMA Assets	Firm + UMA
Year	(%)	Fees (%)	(%)	1000 (%)	(%)	(%)	Dev (%)	(%)	Ratio	Accounts	(Percent)	(\$millions)	Assets	(millions)	(millions) ^ *	Assets ^
YTD 2017	5.4%	5.9%	6.1%	6.0%	N.M.	11.0%	10.3%	10.4%	0.9	18	35.3%	\$14.6	1.0%	\$1,456	\$183	\$ 1,639
2016	8.8%	11.2%	12.0%	12.1%	0.2%	11.7%	10.6%	10.7%	0.7	21	53.6%	\$19.5	1.4%	\$1,401	\$173	\$ 1,574
2015	2.0%	4.3%	1.4%	0.9%	0.1%	10.9%	10.5%	10.5%	1.3	17	53.5%	\$15.7	1.1%	\$1,398	\$207	\$ 1,605
2014	7.2%	9.6%	13.7%	13.2%	0.2%	9.6%	9.0%	9.1%	1.7	19	55.9%	\$15.9	0.9%	\$1,816	\$229	\$ 2,045
2013	27.6%	30.3%	32.4%	33.1%	0.2%	11.5%	11.9%	12.3%	1.4	20	65.7%	\$17.2	0.8%	\$2,061	\$115	\$ 2,176
2012	9.0%	11.4%	16.0%	16.4%	0.4%	15.1%	15.1%	15.4%	1.0	17	94.5%	\$11.3	0.6%	\$1,932	\$82	\$ 2,014
2011	6.9%	9.2%	2.1%	1.5%	0.9%	18.5%	18.7%	19.0%	1.1	9	78.4%	\$4.6	0.2%	\$1,873	\$21	\$ 1,894
2010	22.8%	25.4%	15.1%	16.1%	1.0%	21.8%	21.9%	22.3%	0.0	10	53.2%	\$2.5	0.1%	\$1,769	\$13	\$ 1,782
2009	23.6%	26.2%	26.5%	28.4%	0.6%	19.3%	19.6%	20.1%	-0.3	10	77.4%	\$3.3	0.2%	\$1,539	\$0	\$ 1,539
2008	-37.7%	-36.2%	-37.0%	-37.6%	0.5%	14.6%	15.1%	15.6%	-0.7	14	87.3%	\$3.2	0.3%	\$1,240	\$0	\$ 1,240
2007	8.3%	10.7%	5.5%	5.8%	0.8%	7.8%	7.7%	7.8%	0.8	16	71.4%	\$6.5	0.4%	\$1,658	\$0	\$ 1,658
Annı	ıalized Return	s (03/31/17)			†Inception 9/30/0	11. Year 2001 re.	sults are for 9	0/30/01-12/3	1/01.							
1 Year	12.9%	15.4%	17.2%	17.4%	N.M Informatio	on is not statistic	ally meaning	ful due to an	insufficient nun	nber of portfo	lios in the comp	osite for the e	ntire year.			
3 Year	7.9%	10.3%	10.4%	10.0%	^*UMA Assets as	of 02/28/17										
5 Year	9.5%	11.9%	13.3%	13.3%	^Information is s	upplemental to a	fully GIPS o	ompliant pr	esentation							
10 Year	6.6%	8.9%	7.5%	7.6%												
Since Inception†	6.6%	9.0%	7.6%	7.9%												

Logan Core 50/50 Composite contains fully discretionary mid to large cap growth and concentrated value equity accounts, measured against both the S&P 500 and the Russell 1000. You cannot invest directly in an index. The Russell 1000 index measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000® Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The S&P 500 Index seeks to reflect the risk and return of all large cap companies and is also is used as a proxy for all of the total stock market. It tracks the 500 most widely held stocks on the NYSE or NASDAQ and is widely regarded as the best single gauge of large-cap U.S. equities. The benchmarks selected include the reinvestment of dividends and income, but do not reflect fees, brokerage commissions, withholding taxes, or other expenses of investing. These benchmarks are used for comparative purposes only and generally reflect the risk and investment style of the composite.

50% is invested in the Growth strategy, which invests in US securities with a market capitalization over \$1 billion at time of purchase. A small portion of the strategy (<10%) can be invest in ADR's and Canadian common shares. Turnover is low, typically under 35% and holdings range between 30 and 40 positions. 50% is invested in the LCV strategy, which invests in 10-12 very large cap stocks with strong balance sheets, strong cash flows and relatively high dividend yields. ADR's may be included in the portfolio (generally less than 20%). Turnover is typically 30-50% annually. Includes accounts paying both wrap and commission fees. The minimum account size for this composite is \$100 thousand.

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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 disclosure presentation.

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to determine whether to hire or retain the adviser. Logan Capital Management, Inc. is a privately owned registered investment adviser. The firm maintains a complete list and description of composites, which is available upon request..

Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Past performance is not indicative of future results.

The U.S. Dollar is the currency used to express performance. Returns are presented gross and net of management fees and include the reinvestment of all income. Some accounts in the composite pay a bundled wrap fee based on a percentage of assets under management. Other than portfolio management, this fee includes brokerage commissions, portfolio monitoring, consulting services, and in some cases, custodial services. As of December 31, 2016, 55.63% of the composite assets were charged a wrap fee. Gross returns for accounts paying a wrap fee are shown as supplemental information as they do not reflect the deduction of any fees or transaction costs; net returns are derived by reducing the gross return by the highest wrap fee (0.55% quarterly fee). Gross returns for non-wrap accounts include investment management fees and have been reduced by transaction costs; net returns have been reduced by management fees and transaction costs. The annual composite dispersion presented is an asset-weighted standard deviation calculated for the accounts in the composite the entire year. Additional information regarding the policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The investment management fee schedule for non-wrap accounts over \$10 million is as follows: 80 basis points on the first \$25 million, 70 basis points on the next \$25 million, 50 basis points on the next \$25 million and 45 basis points on the \$25 million thereafter. The investment advisory fees charged for accounts whose market value exceeds \$100 million are negotiable. Accounts under \$10 million will be charged a flat 1.00% per annum. Actual investment advisory fees incurred by clients may vary. Wrap fee schedules are provided by independent wrap sponsors and are available upon request from the respective wrap sponsor.

The Logan Core 50/50 Composite was created June 30, 2002