

Indiana Public Retirement System Select Equity October 31, 2017



Select Equity Year-to-Date Performance October 31, 2017

Select Equity has faced a challenging environment thus far in 2017. Better than expected earnings have been ubiquitous, an important factor pushing the US stock market to gains during each month of this year. Both the prevalence of positive earnings surprises and the market's steady rise have limited opportunities for the Strategy's holdings to showcase their ability to deliver solid earnings and returns during volatile periods. Although the broad market has risen consistently, results for individual economic sectors have been more volatile. For example, Consumer Staples had five months with positive returns and five months with negative returns. Select's holdings performed very well within this sector, benefiting from the heightened volatility.

Select's holdings also performed well within the surging Technology sector. Autodesk and Visa were among the portfolio's three best performers for the year-to-date. Unfortunately, the strong gains of these holdings were partially offset by weak performance from Qualcomm. Qualcomm tumbled in January after Apple filed suit alleging that Qualcomm had been overcharging Apple for intellectual property utilized in the iPhone by basing the licensing fee on the overall price of the phone rather than the price of the individual components that embody the intellectual property. Apple also directed its contract manufacturers to stop making patent royalty payments to Qualcomm. Qualcomm shares experienced additional selling pressure in July when the company reported that the loss of royalty revenue from Apple's contract manufacturers had reduced earnings by 40%. At the end of October, news broke that Apple might exclude Qualcomm chips from the next iteration of the iPhone. We believe the market has overreacted, both to the long run threat to Qualcomm's pricing model posed by the lawsuit and the short run impact on Qualcomm's earnings due to the withheld royalties. Qualcomm's pricing model has been reviewed by several regulatory bodies around the world. Although Qualcomm has been fined in some cases, its pricing model has always We expect a settlement of the dispute will be reached that preserves Qualcomm's pricing methodology with a reduction in the percentage of iPhone value paid by Apple.

Within the Producer Durables sector **Caterpillar** has been a bright spot, delivering the second best performance among all of Select holdings for the year-to-date. Caterpillar illustrates the benefits of holding on to a Market Power stock through tough times. Caterpillar was a drag on performance from January 31, 2013 through December 31, 2016 due to excess inventory in the Chinese market as well as weak demand for equipment used in mining and oil exploration/production. Former CEO Doug Oberhelman pared costs to compensate for the decline in demand. With demand now on the upswing, new CEO Jim Umpleby has been able to produce better than expected earnings and strong stock market returns. Unfortunately, Caterpillar's gains have been more than offset by weak results from **WW Grainger**, **General Electric**, **Stericycle**, and **Johnson Controls**.



Grainger declined sharply after reporting weaker than expected sales and earnings for the first quarter. Grainger was facing stiff price competition and management decided to respond by accelerating price cuts that were planned for later in the year. The plan to accelerate price cuts suggested that management had lost confidence in Grainger's pricing power. From OakBrook's perspective, Grainger's Market Power had weakened and the decision was made to eliminate the portfolio's position in May.

General Electric has been going through a multi-year transformation from a broadly diversified conglomerate to a firm focused on industrial products and services. The stock price had benefited through much of this transformation period, delivering positive alpha to the portfolio for the five years ended December 31, 2016. The stock has been the worst performer within the Select Equity portfolio thus far in 2017. Analysts and investors have grown impatient with opaque earnings reports and the lack of earnings growth. New CEO John Flannery has already taken steps to increase transparency for some aspects of GE's financials. He will unveil his plans to improve operations and divest non-core businesses on November 13, 2017. A solid plan combined with General Electric's intellectual property and large installed base of equipment should allow the company to generate strong profit growth. We will be examining the plan very closely.

Stericycle was penalized in early August after it lowered 2017 earnings and revenue guidance due to weaker than expected pricing on medical waste disposal contracts. Contracts with small medical offices generate higher profit margins than contracts with large medical groups and hospitals. The proportion of Stericycle's contracts with small medical offices has been declining as care providers continue to consolidate. We believe the negative impact of this consolidation trend has largely played out given the sharp decline in the number of small medical offices that has already occurred. We expect the benefits of Stericycle's Market Power strength as the leading provider of medical waste disposal services will be more evident against a more stable customer composition. Stericycle is also beginning to deliver some of the synergies it expected from its 2015 purchase of **Shred-It**. Document disposal revenues have grown at a high single digit rate the past two quarters.

Johnson Controls stock price dropped in early February after it beat earnings expectations but missed sales forecasts. The sales miss resulted from issues integrating business units following the September 2016 merger with **Tyco**. Shares also declined in late July after Johnson Controls lowered its cash flow forecast for the year. Factors contributing to the decline in cash flow included a buildup in battery inventories and a delayed dividend payment from joint venture partner **Toshiba**. We expect cash flow will improve in 2018 as battery inventories work down and dividend payments are received. Overall, the firm has strengthened its Market Power position through the merger with Tyco and spin-off of **Adient**, its car interior division. It has reduced its direct exposure to automakers from 59% of revenues to 6% and increased its share of recurring service and aftermarket parts revenue to more than 40%.

Within Consumer Discretionary, **Nike** and **Walt Disney** have been Select's only holdings for much of the year. Nike's performance has suffered due to the resurgence of long term



rival **Adidas** along with the general negative impact of **Amazon** on retailers, including sellers of activewear. We expect Nike will regain both market share and equity valuation. Management has a plan in place emphasizing innovative running shoe technology, direct sales to consumers, and accelerated manufacturing processes. The combination of direct sales and accelerated manufacturing should better match demand trends to production and reduce the amount of inventory that needs to be cleared at discount.

Disney continues to be held back by weakness at ESPN. It is taking steps to improve results at ESPN through cost cuts as well as investing in **BAMTech**. BAMTech will be introducing a new ESPN streaming service in 2018, to be followed by a streaming service focused on Disney and Pixar content in 2019. Once ESPN stabilizes, valuation should improve as investors focus on the strong results being generated by Disney's film studios and theme parks.

Within Health Care, Select's holdings were performing well through the end of September. However, **Merck**, **Gilead Sciences**, and **Amgen** struggled during October. Merck beat earnings expectations and revised its 2017 earnings forecast higher. However, the firm missed revenue expectations and also announced a modification to a current phase 3 trial of cancer drug Keytruda combined with chemotherapy that will likely push the trial's conclusion date into 2019. Gilead and Amgen both beat expectations for earnings and revenues, but failed to match sales expectations for some legacy medications. For both firms, sales of newer medications were better than expected.

OakBrook remains confident in the strength of the Market Power possessed by the Select Equity portfolio's holdings as well as the superior long term earnings and return potential provided by their Market Power. Signs of progress on the stock-specific issues discussed in prior paragraphs combined with a change in the market environment should help the portfolio realize its potential. US stock market returns are likely to grow more volatile. The market has been unusually calm thus far this year, shrugging off rising interest rates, uncertainty about US government policy, and tensions with North Korea. A return to more normal volatility levels will provide an opportunity for the entire Select Equity portfolio to demonstrate its strengths.



OakBrook Investments, LLC PORTFOLIO ACTIVITY SUMMARY

Indiana Public Retirement System From 09-30-17 to 10-31-17

Portfolio Value on 09-30-17	24,838,148.14
Contributions	0.00
Withdrawals	0.00
Realized Gains	0.00
Unrealized Gains	-37,903.32
Interest	91.57
Dividends	21,414.89
Portfolio Value on 10-31-17	24,821,751.28

OakBrook Investments, LLC TWR FOR SELECTED PERIODS **ANNUALIZED**

Indiana Public Retirement System

October 31, 2017

	Month	Quarter	Year	Latest 1	Inception
	To Date	To Date	To Date	Year	To Date
Portfolio Gross of Fees	-0.07	-0.07	9.96	14.09	14.09
Portfolio Net of Fees	-0.09	-0.09	9.67	13.72	13.72
Russell 1000 Growth	3.87	3.87	25.40	29.72	29.72
S&P 500 Index	2.33	2.33	16.91	23.63	23.63



OakBrook Investments, LLC PERFORMANCE HISTORY

Indiana Public Retirement System From 10-31-16 to 10-31-17

	Percent Return Per Period						Cumulati Basis :			
Tir	me Per	riod	Portfolio Gross of Fees	Portfolio Net of Fees	Russell 1000 Growth	S&P 500 Index	Portfolio Gross of Fees	Portfolio Net of Fees	Russell 1000 Growth	S&P 500 Index
		10-31-2016					100.00	100.00	100.00	100.00
10-31-2016	To	11-30-2016	2.44	2.41	2.18	3.70	102.44	102.41	102.18	103.70
11-30-2016	to	12-31-2016	1.28	1.25	1.24	1.98	103.75	103.69	103.45	105.75
12-31-2016	to	01-31-2017	2.03	2.01	3.37	1.90	105.86	105.78	106.94	107.76
01-31-2017	to	02-28-2017	3.49	3.47	4.15	3.97	109.56	109.44	111.38	112.04
02-28-2017	to	03-31-2017	-0.47	-0.50	1.16	0.12	109.04	108.90	112.67	112.17
03-31-2017	to	04-30-2017	0.21	0.18	2.29	1.03	109.26	109.09	115.24	113.32
04-30-2017	to	05-31-2017	1.80	1.77	2.60	1.41	111.23	111.03	118.24	114.92
05-31-2017	to	06-30-2017	0.39	0.36	-0.26	0.62	111.66	111.43	117.93	115.63
06-30-2017	to	07-31-2017	1.04	1.01	2.66	2.06	112.82	112.55	121.06	118.01
07-31-2017	to	08-31-2017	0.37	0.35	1.83	0.31	113.24	112.94	123.28	118.37
08-31-2017	to	09-30-2017	0.81	0.78	1.30	2.06	114.16	113.82	124.88	120.81
09-30-2017	to	10-31-2017	-0.07	-0.09	3.87	2.33	114.09	113.72	129.72	123.63



OakBrook Investments, LLC PORTFOLIO SUMMARY

Indiana Public Retirement System October 31, 2017

Security Type	Total Cost Market Value		Pct. Assets	Cur. Yield	Est. Annual Income
Equities COMMON STOCK					
COMMON STOCK	1 207 712 56	1 072 200 00	4.2	2.1	22 5 40 00
Energy	1,287,713.56	1,073,280.00	4.3	3.1	33,540.00
Industrials	3,993,065.76	4,137,606.18	16.7	2.4	100,357.88
Consumer Discretionary	3,105,628.41	3,181,681.05	12.8	1.6	49,592.32
Consumer Staples	3,212,261.50	3,269,781.26	13.2	2.6	86,180.48
Health Care	6,023,320.52	6,472,628.52	26.1	1.9	123,484.48
Financials	991,639.21	1,320,261.25	5.3	1.9	25,410.00
Information Technology	4,034,095.38	5,241,939.60	21.1	0.7	38,053.44
COMMON STOCK	22,647,724.34	24,697,177.86	99.5	1.8	456,618.60
-	22,647,724.34	24,697,177.86	99.5	1.8	456,618.60
Cash and Equiv.					
CASH AND EQUIVALENTS	124,573.42	124,573.42	0.5	0.0	0.00
	124,573.42	124,573.42	0.5	0.0	0.00
TOTAL PORTFOLIO	22,772,297.76	24,821,751.28	100.0	1.8	456,618.60



OakBrook Investments, LLC PORTFOLIO APPRAISAL

Indiana Public Retirement System

October 31, 2017

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Cur. <u>Yield</u>
COMMON STO	CK						
1,095.0000	Alphabet Inc. Class C	801.88	878,056.75	1,016.64	1,113,220.80	4.5	0.0
7,531.0000	Amgen, Inc.	148.68	1,119,722.52	175.22	1,319,581.82	5.3	2.6
15,377.0000	Autodesk, Inc.	74.34	1,143,162.45	124.96	1,921,509.92	7.7	0.0
1,710.0000	Biogen Idec Inc.	281.85	481,968.19	311.66	532,938.60	2.1	0.0
9,625.0000	CME Group	103.03	991,639.21	137.17	1,320,261.25	5.3	1.9
11,778.0000	Caterpillar Inc.	88.13	1,038,037.50	135.80	1,599,452.40	6.4	2.3
39,762.0000	General Electric Company	29.33	1,166,284.90	20.16	801,601.92	3.2	4.8
13,578.0000	Gilead Sciences, Inc.	72.51	984,607.14	74.96	1,017,806.88	4.1	2.8
25,439.0000	Johnson Controls International	40.54	1,031,197.99	41.39	1,052,920.21	4.2	2.4
11,380.0000	McCormick & Company, Inc.	95.90	1,091,374.42	99.53	1,132,651.40	4.6	1.9
13,261.0000	Medtronic, Plc	81.64	1,082,668.73	80.52	1,067,775.72	4.3	2.3
19,255.0000	Merck & Co., Inc.	60.33	1,161,639.89	55.09	1,060,757.95	4.3	3.4
21,549.0000	NIKE, Inc.	53.27	1,147,810.62	54.99	1,184,979.51	4.8	1.3
11,574.0000	PepsiCo, Inc.	107.93	1,249,161.18	110.23	1,275,802.02	5.1	2.9
12,568.0000	QUALCOMM, Inc.	66.11	830,856.42	51.01	641,093.68	2.6	4.5
16,770.0000	Schlumberger Limited	76.79	1,287,713.56	64.00	1,073,280.00	4.3	3.1
17,800.0000	Starbucks Corporation	52.88	941,191.30	54.84	976,152.00	3.9	1.8
9,649.0000	Stericycle, Inc.	78.51	757,545.37	70.85	683,631.65	2.8	0.0
9,976.0000	The Procter & Gamble Company	87.38	871,725.90	86.34	861,327.84	3.5	3.2
10,434.0000	The Walt Disney Company	97.43	1,016,626.49	97.81	1,020,549.54	4.1	1.6
14,145.0000	Varian Medical Systems, Inc.	84.32	1,192,714.05	104.19	1,473,767.55	5.9	0.0
14,240.0000	Visa Inc.	83.01	1,182,019.76	109.98	1,566,115.20	6.3	0.6
			22,647,724.34		24,697,177.86	99.5	1.8
CASH AND EQU	JIVALENTS						
	Cash		108,415.56		108,415.56	0.4	0.0
	Dividends Receivable		16,157.86		16,157.86	0.1	0.0
			124,573.42		124,573.42	0.5	0.0
TOTAL PORTF	OLIO		22,772,297.76		24,821,751.28	100.0	1.8



OakBrook Investments, LLC DATE TO DATE GAINS AND LOSSES

Indiana Public Retirement System From 09-30-17 to 10-31-17

				Realized Gain or Loss		Unrealized Gain or Loss	
09-30-17 Market Value	Additions Withdrawals	10-31-17 Market Value	10-31-17 Cost Basis	Cost	Market	Cost	Market
1,050,225.45	0.00	1,113,220.80	878,056.75	0.00	0.00	235,164.05	62,995.35
1,404,154.95	0.00	1,319,581.82	1,119,722.52	0.00	0.00	199,859.30	-84,573.13
1,726,222.02	0.00	1,921,509.92	1,143,162.45	0.00	0.00	778,347.47	195,287.90
535,435.20	0.00	532,938.60	481,968.19	0.00	0.00	50,970.41	-2,496.60
1,305,920.00	0.00	1,320,261.25	991,639.21	0.00	0.00	328,622.04	14,341.25
1,468,834.38	-9,186.84	1,599,452.40	1,038,037.50	0.00	0.00	561,414.90	130,618.02
961,445.16	0.00	801,601.92	1,166,284.90	0.00	0.00	-364,682.98	-159,843.24
1,100,089.56	0.00	1,017,806.88	984,607.14	0.00	0.00	33,199.74	-82,282.68
1,024,937.31	0.00	1,052,920.21	1,031,197.99	0.00	0.00	21,722.22	27,982.90
1,168,043.20	-5,348.60	1,132,651.40	1,091,374.42	0.00	0.00	41,276.98	-35,391.80
1,031,307.97	0.00	1,067,775.72	1,082,668.73	0.00	0.00	-14,893.01	36,467.75
1,232,897.65	0.00	1,060,757.95	1,161,639.89	0.00	0.00	-100,881.94	-172,139.70
1,117,315.65	0.00	1,184,979.51	1,147,810.62	0.00	0.00	37,168.89	67,663.86
1,289,690.82	0.00	1,275,802.02	1,249,161.18	0.00	0.00	26,640.84	-13,888.80
651,525.12	0.00	641,093.68	830,856.42	0.00	0.00	-189,762.74	-10,431.44
1,169,875.20	0.00	1,073,280.00	1,287,713.56	0.00	0.00	-214,433.56	-96,595.20
956,038.00	0.00	976,152.00	941,191.30	0.00	0.00	34,960.70	20,114.00
691,061.38	0.00	683,631.65	757,545.37	0.00	0.00	-73,913.72	-7,429.73
907,616.48	-6,879.45	861,327.84	871,725.90	0.00	0.00	-10,398.06	-46,288.64
1,028,479.38	0.00	1,020,549.54	1,016,626.49	0.00	0.00	3,923.05	-7,929.84
1,415,348.70	0.00	1,473,767.55	1,192,714.05	0.00	0.00	281,053.50	58,418.85
1,498,617.60	0.00	1,566,115.20	1,182,019.76	0.00	0.00	384,095.44	67,497.60
24,735,081.18		24,697,177.86	22,647,724.34	0.00	0.00	2,049,453.52	-37,903.32
62.198.56	46.125.43	108,415.56	108,415,56				
40,868.40	-24,710.54	16,157.86	16,157.86				
103,066.96		124,573.42	124,573.42				
24,838,148.14		24,821,751.28	22,772,297.76	0.00	0.00	2,049,453.52	-37,903.32
	1,050,225.45 1,404,154.95 1,726,222.02 535,435.20 1,305,920.00 1,468,834.38 961,445.16 1,100,089.56 1,024,937.31 1,168,043.20 1,031,307.97 1,232,897.65 1,117,315.65 1,289,690.82 651,525.12 1,169,875.20 956,038.00 691,061.38 907,616.48 1,028,479.38 1,415,348.70 1,498,617.60 24,735,081.18	1,050,225.45 0.00 1,404,154.95 0.00 1,726,222.02 0.00 535,435.20 0.00 1,468,834.38 -9,186.84 961,445.16 0.00 1,100,089.56 0.00 1,024,937.31 0.00 1,031,307.97 0.00 1,232,897.65 0.00 1,117,315.65 0.00 1,117,315.65 0.00 1,289,690.82 0.00 1,289,690.82 0.00 651,525.12 0.00 1,169,875.20 0.00 956,038.00 0.00 691,061.38 0.00 997,616.48 -6,879.45 1,028,479.38 0.00 1,415,348.70 0.00 24,735,081.18 62,198.56 46,125.43 40,868.40 103,066.96	Market Value Withdrawals Market Value 1,050,225.45 0.00 1,113,220.80 1,404,154.95 0.00 1,319,581.82 1,726,222.02 0.00 1,921,509.92 535,435.20 0.00 532,938.60 1,305,920.00 0.00 1,320,261.25 1,468,834.38 -9,186.84 1,599,452.40 961,445.16 0.00 801,601.92 1,100,089.56 0.00 1,017,806.88 1,024,937.31 0.00 1,052,920.21 1,168,043.20 -5,348.60 1,132,651.40 1,031,307.97 0.00 1,067,775.72 1,232,897.65 0.00 1,060,757.95 1,117,315.65 0.00 1,184,979.51 1,289,690.82 0.00 1,275,802.02 651,525.12 0.00 641,093.68 1,169,875.20 0.00 1,073,280.00 956,038.00 0.00 976,152.00 691,061.38 0.00 683,631.65 907,616.48 -6,879.45 861,327.84 1,498	Market Value Withdrawals Market Value Cost Basis 1,050,225.45 0.00 1,113,220.80 878,056.75 1,404,154.95 0.00 1,319,581.82 1,119,722.52 1,726,222.02 0.00 1,921,509.92 1,143,162.45 535,435.20 0.00 532,938.60 481,968.19 1,305,920.00 0.00 1,320,261.25 991,639.21 1,468,834.38 -9,186.84 1,599,452.40 1,038,037.50 961,445.16 0.00 801,601.92 1,166,284.90 1,100,089.56 0.00 1,017,806.88 984,607.14 1,024,937.31 0.00 1,052,920.21 1,031,197.99 1,168,043.20 -5,348.60 1,132,651.40 1,091,374.42 1,031,307.97 0.00 1,067,775.72 1,082,668.73 1,232,897.65 0.00 1,060,757.95 1,161,639.89 1,117,315.65 0.00 1,275,802.02 1,249,161.18 651,525.12 0.00 641,093.68 830,856.42 1,69,875.20 0.00 1,073,280.00 </td <td> 1,050,225.45 0.00</td> <td> 1,050,225,45</td> <td> Name</td>	1,050,225.45 0.00	1,050,225,45	Name



OakBrook Investments, LLC FUNDAMENTAL DATA

Indiana Public Retirement System

October 31, 2017

Security	Price	Annual Dividend	<u>Yield</u>	Latest 4 Qtr. PE	Latest 4 Qtr. EPS	Latest Annual Book Value	Latest Annual Price/ Book	Beta
COMMON STOCK								
Alphabet Inc. Class C	1,016.64	0.000	0.0	30.2	33.72	226.11	4.5	1.12
Amgen, Inc.	175.22	4.600	2.6	14.4	12.20	44.36	4.0	1.19
Autodesk, Inc.	124.96	0.000	0.0	N M	-2.62	1.44	86.8	1.41
Biogen Idec Inc.	311.66	0.000	0.0	16.6	18.82	60.81	5.1	1.24
CME Group	137.17	2.640	1.9	30.1	4.56	61.38	2.2	0.94
Caterpillar Inc.	135.80	3.120	2.3	25.5	5.33	26.52	5.1	1.26
General Electric Company	20.16	0.960	4.8	15.7	1.29	8.78	2.3	0.94
Gilead Sciences, Inc.	74.96	2.080	2.8	8.4	8.97	19.32	3.9	0.97
Johnson Controls International	41.39	1.000	2.4	14.0	2.95	21.16	2.0	1.03
McCormick & Company, Inc.	99.53	1.880	1.9	24.8	4.01	19.25	5.2	0.69
Medtronic, Plc	80.52	1.840	2.3	22.4	3.59	37.41	2.2	0.72
Merck & Co., Inc.	55.09	1.880	3.4	17.0	3.23	14.47	3.8	0.84
NIKE, Inc.	54.99	0.720	1.3	23.4	2.35	7.33	7.5	1.14
PepsiCo, Inc.	110.23	3.220	2.9	21.6	5.11	9.31	11.8	0.68
QUALCOMM, Inc.	51.01	2.280	4.5	12.0	4.25	21.20	2.4	1.04
Schlumberger Limited	64.00	2.000	3.1	49.8	1.29	28.57	2.2	0.93
Starbucks Corporation	54.84	1.000	1.8	26.2	2.09	4.04	13.6	1.01
Stericycle, Inc.	70.85	0.000	0.0	21.1	3.35	24.14	2.9	1.07
The Procter & Gamble Company	86.34	2.758	3.2	22.0	3.92	21.22	4.1	0.64
The Walt Disney Company	97.81	1.560	1.6	17.0	5.74	26.58	3.7	1.01
Varian Medical Systems, Inc.	104.19	0.000	0.0	28.6	3.65	16.29	6.4	0.89
Visa Inc.	109.98	0.660	0.6	32.0	3.44	12.77	8.6	0.94
COMMON STOCK Ave	rage		1.8	23.4	5.50	31.16	11.5	1.00
OVERALL AVERAGE			1.8	23.4	5.50	31.16	11.5	1.00

A NM in the PE column indicates that a PE is not meaningful.



OakBrook Investments, LLC PURCHASE AND SALE

Indiana Public Retirement System

From 10-01-17 To 10-31-17

Trade	Settle			Unit	
Date	Date	Quantity	Security	Price	Amount

No transactions this period

OakBrook Investments, LLC COMMISSION PURPOSE

Indiana Public Retirement System

From 10-01-17 to 10-31-17

Commission
AmountAvg. Commission
Per SharePercent of Total
Commission

No commissions this period



OakBrook urges our clients to compare information provided in its statement with those from your custodian.

If you are not receiving a custodial statement, please notify OakBrook.