



EQUITY RISK SCIENCES, INC
Institutional Investment Data Analytics

AN INTRODUCTION TO ERS'S PROPRIETARY DATA ANALYTICS TECHNOLOGY

January 14, 2022

ERS'S PREDICTIVE ANALYTICS -VS- S&P 500 INDEX



- 🌀 **Objective:** Employ a longitudinal study consisting of 331 5-year periods over 32 years to determine the performance results of using **ERS's Predictive Analytics** technology compared to the performance of the S&P 500 index in the same periods.
- 🌀 **Study Period:** 331 5-year periods: 12/1988 through 6/2016, monthly
Sample: 1,000* largest companies by market cap in each period
 - Minimum market cap of \$100 million
- 🌀 **Study Method:**
 - ERS assigned each company a **PRI Rating™** and an **ERI Rating™** at the beginning of each period.
 - Grouped companies into portfolios based on their **PRI Ratings™** and **ERI Ratings™** in each period
 - Calculated each portfolio's average return based on each company's 5-year rate of return

**If fewer than 1,000 companies met this criteria, all were used*

Conclusions:

ERS's proprietary predictive analytics technology produced far greater profitability than the S&P 500 Index, reduced volatility and reduced losses in flat, rising *and* falling markets.

ERS's COMPREHENSIVE 32-YEAR BENCHMARK PERFORMANCE STUDY RESULTS

Below are the results of employing ERS's predictive analytics technology over the 331 5-year periods from 12/31/1988 to 6/30/2021.

We know of no other technology that has demonstrated such positive performance results.

In Falling Periods:

The S&P 500 fell in 83 out of 331 5-year periods; its average decline was -11.7%, while ERS's portfolios fell just 6 times, producing an average gain of 42.4%.

In Rising Periods:

The S&P 500 rose in 248 out of 331 5-year periods; its average gain was 76.4%, while ERS's portfolios produced an average gain of 119.1%.

In All 331 5-Year Periods:

The S&P 500's average gain was 54.3%, while ERS's portfolios produced an average gain of 99.8%.

ANALYSIS OF ERS'S PORTFOLIOS USING ERI RATING™

Portfolio ERI Rating™	# Periods	Average 5Y Performance	Average S&P 500
5.9 to 10.9	165	144%	77%
10.9 to 20.1	166	56%	32%

Portfolio ERI Rating™	# Periods	Average 5Y Performance	Average S&P 500
5.9 to 9.6	110	161%	84%
9.6 to 12.3	110	82%	42%
12.3 to 20.1	111	56%	37%

Portfolio ERI Rating™	# Periods	Average 5Y Performance	Average S&P 500
5.9 to 9	83	162%	87%
9 to 10.9	82	125%	67%
10.9 to 13.1	83	54%	24%
13.1 to 20.1	83	59%	39%

**IN 331 5-YEAR TESTS, OVER 32 YEARS IN RISING, FALLING & FLAT MARKETS
ERS'S TECHNOLOGY AVERAGE ANNUAL PROFITS: 99.8% VS 54.3% ON THE S&P INDEX**

Date	S&P 500	ERS's Portfolio	Avg. ERI	Date	S&P 500	ERS's Portfolio	Avg. ERI	Date	S&P 500	ERS's Portfolio	Avg. ERI	Date	S&P 500	ERS's Portfolio	Avg. ERI
12/88	68%	172%	9.0	4/91	74%	116%	10.1	8/93	107%	133%	9.5	12/95	114%	127%	7.2
1/89	62%	165%	9.6	5/91	72%	124%	10.3	9/93	122%	137%	9.5	1/96	115%	147%	7.2
2/89	62%	147%	9.2	6/91	81%	137%	9.6	10/93	135%	131%	9.7	2/96	94%	86%	6.9
3/89	51%	181%	9.0	7/91	65%	112%	9.8	11/93	152%	141%	9.9	3/96	80%	113%	6.6
4/89	46%	135%	9.9	8/91	65%	105%	10.6	12/93	164%	166%	10.2	4/96	91%	151%	6.9
5/89	42%	82%	10.7	9/91	77%	243%	9.8	1/94	166%	149%	10.2	5/96	88%	152%	7.9
6/89	40%	128%	10.7	10/91	80%	242%	9.3	2/94	165%	159%	9.9	6/96	83%	195%	7.9
7/89	32%	149%	10.9	11/91	102%	263%	8.5	3/94	189%	159%	8.9	7/96	89%	233%	6.8
8/89	35%	159%	10.6	12/91	78%	130%	9.5	4/94	196%	224%	8.7	8/96	74%	201%	6.8
9/89	33%	104%	10.5	1/92	92%	109%	10.0	5/94	185%	240%	8.7	9/96	51%	126%	7.0
10/89	39%	153%	9.5	2/92	92%	102%	10.5	6/94	209%	260%	8.1	10/96	50%	182%	6.7
11/89	31%	186%	9.5	3/92	88%	89%	9.6	7/94	190%	254%	8.1	11/96	51%	166%	6.7
12/89	30%	172%	9.5	4/92	93%	84%	8.8	8/94	178%	230%	8.8	12/96	55%	182%	7.1
1/90	43%	207%	9.5	5/92	104%	170%	8.7	9/94	177%	177%	8.8	1/97	44%	187%	7.2
2/90	47%	207%	8.8	6/92	117%	241%	9.0	10/94	189%	208%	9.1	2/97	40%	185%	7.6
3/90	47%	184%	9.2	7/92	125%	205%	9.4	11/94	206%	188%	7.7	3/97	52%	119%	6.2
4/90	56%	187%	8.6	8/92	117%	187%	9.0	12/94	220%	215%	7.4	4/97	34%	194%	6.5
5/90	48%	100%	9.8	9/92	127%	228%	9.1	1/95	196%	206%	7.2	5/97	26%	150%	8.2
6/90	52%	275%	9.7	10/92	118%	169%	9.4	2/95	180%	202%	7.5	6/97	12%	121%	8.2
7/90	58%	342%	9.4	11/92	121%	174%	10.7	3/95	199%	272%	7.3	7/97	-4%	91%	8.9
8/90	74%	541%	7.6	12/92	123%	138%	11.3	4/95	182%	166%	7.2	8/97	2%	75%	9.3
9/90	91%	554%	7.0	1/93	123%	120%	11.1	5/95	166%	148%	7.8	9/97	-14%	38%	9.5
10/90	91%	661%	7.0	2/93	137%	195%	10.3	6/95	167%	128%	8.8	10/97	-3%	58%	8.7
11/90	88%	376%	7.1	3/93	144%	157%	10.0	7/95	155%	108%	8.7	11/97	-2%	45%	9.0
12/90	87%	234%	8.2	4/93	153%	183%	9.5	8/95	170%	116%	8.6	12/97	-9%	14%	8.0
1/91	85%	211%	9.0	5/93	142%	139%	9.3	9/95	146%	114%	8.3	1/98	-13%	19%	7.8
2/91	74%	223%	10.0	6/93	152%	146%	9.0	10/95	146%	96%	7.9	2/98	-20%	14%	8.8
3/91	72%	172%	10.5	7/93	150%	166%	8.6	11/95	117%	107%	7.6	3/98	-23%	12%	8.5

**IN 331 5-YEAR TESTS, OVER 32 YEARS IN RISING, FALLING & FLAT MARKETS
ERS'S TECHNOLOGY AVERAGE ANNUAL PROFITS: 99.8% VS 54.3% ON THE S&P INDEX**

Date	S&P 500	ERS's Portfolio	Avg. ERI	Date	S&P 500	ERS's Portfolio	Avg. ERI	Date	S&P 500	ERS's Portfolio	Avg. ERI	Date	S&P 500	ERS's Portfolio	Avg. ERI
4/98	-18%	24%	8.6	8/00	-20%	98%	12.0	12/02	67%	107%	11.4	4/05	3%	21%	11.2
5/98	-12%	38%	8.9	9/00	-14%	91%	11.1	1/03	61%	89%	10.7	5/05	-9%	24%	12.4
6/98	-14%	25%	8.2	10/00	-16%	96%	10.8	2/03	58%	95%	9.0	6/05	-13%	22%	12.1
7/98	-12%	45%	7.0	11/00	-5%	90%	9.2	3/03	56%	99%	9.3	7/05	-11%	19%	13.0
8/98	5%	132%	6.4	12/00	-5%	99%	9.2	4/03	51%	92%	10.7	8/05	-14%	10%	13.6
9/98	-2%	152%	6.2	1/01	-6%	49%	10.5	5/03	45%	77%	12.0	9/05	-7%	14%	12.7
10/98	-4%	101%	6.9	2/01	3%	63%	9.7	6/03	31%	43%	12.4	10/05	-2%	29%	11.6
11/98	-9%	91%	8.5	3/01	12%	74%	8.7	7/03	28%	45%	12.9	11/05	-6%	29%	13.2
12/98	-10%	59%	11.8	4/01	5%	39%	10.0	8/03	27%	40%	13.8	12/05	1%	25%	13.1
1/99	-12%	62%	11.5	5/01	1%	37%	10.3	9/03	17%	35%	13.3	1/06	0%	22%	14.0
2/99	-8%	88%	11.2	6/01	4%	32%	10.1	10/03	-8%	7%	15.2	2/06	4%	12%	13.3
3/99	-12%	81%	11.0	7/01	5%	39%	10.3	11/03	-15%	6%	15.2	3/06	2%	5%	13.2
4/99	-17%	58%	11.6	8/01	15%	62%	10.0	12/03	-19%	9%	15.8	4/06	4%	6%	12.9
5/99	-14%	66%	13.2	9/01	28%	95%	7.7	1/04	-27%	-12%	15.8	5/06	6%	16%	11.9
6/99	-17%	71%	13.7	10/01	30%	81%	9.0	2/04	-36%	-16%	14.6	6/06	4%	22%	11.9
7/99	-17%	65%	13.2	11/01	23%	86%	12.3	3/04	-29%	-7%	14.3	7/06	1%	42%	10.9
8/99	-16%	66%	11.0	12/01	24%	56%	13.8	4/04	-21%	8%	13.4	8/06	-7%	38%	11.6
9/99	-13%	75%	11.3	1/02	27%	58%	13.7	5/04	-18%	15%	12.8	9/06	-15%	15%	11.6
10/99	-17%	71%	11.2	2/02	27%	76%	13.7	6/04	-19%	15%	12.2	10/06	-9%	13%	12.0
11/99	-15%	69%	12.1	3/02	24%	61%	13.8	7/04	-10%	15%	11.7	11/06	-11%	5%	12.1
12/99	-18%	90%	13.6	4/02	38%	75%	13.3	8/04	-8%	27%	11.3	12/06	-11%	7%	11.8
1/00	-15%	83%	13.3	5/02	43%	91%	12.7	9/04	-5%	32%	11.5	1/07	-9%	13%	12.1
2/00	-12%	108%	14.1	6/02	52%	87%	11.3	10/04	-8%	22%	12.0	2/07	-3%	11%	11.9
3/00	-21%	86%	14.3	7/02	60%	117%	10.0	11/04	-7%	19%	12.4	3/07	-1%	28%	11.7
4/00	-20%	82%	13.6	8/02	61%	108%	10.2	12/04	-8%	25%	13.1	4/07	-6%	9%	11.6
5/00	-16%	101%	13.9	9/02	87%	111%	9.8	1/05	-9%	20%	12.5	5/07	-14%	-8%	13.2
6/00	-18%	114%	13.4	10/02	75%	122%	10.6	2/05	-8%	13%	12.2	6/07	-9%	-2%	12.7
7/00	-14%	109%	12.4	11/02	58%	84%	11.6	3/05	-1%	13%	11.9	7/07	-5%	11%	12.2

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8/07	-5%	23%	12.3	12/09	85%	137%	12.5	4/12	71%	77%	12.9	8/14	46%	19%	18.2
9/07	-6%	28%	11.9	1/10	86%	123%	12.5	5/12	84%	76%	11.8	9/14	51%	34%	16.6
10/07	-9%	21%	12.1	2/10	91%	131%	13.2	6/12	78%	63%	12.3	10/14	51%	43%	15.9
11/07	-4%	27%	12.3	3/10	77%	120%	13.6	7/12	79%	72%	12.3	11/14	52%	37%	18.2
12/07	-3%	28%	12.4	4/10	76%	113%	13.5	8/12	76%	61%	13.2	12/14	57%	27%	17.7
1/08	9%	34%	10.8	5/10	93%	140%	12.2	9/12	75%	103%	13.2	1/15	62%	33%	16.7
2/08	14%	47%	10.8	6/10	100%	156%	10.9	10/12	82%	128%	13.1	2/15	40%	11%	19.8
3/08	19%	50%	10.0	7/10	91%	147%	11.3	11/12	87%	112%	14.1	3/15	25%	-8%	18.7
4/08	15%	41%	10.6	8/10	88%	109%	10.2	12/12	87%	122%	14.1	4/15	40%	6%	17.8
5/08	16%	46%	11.9	9/10	68%	74%	11.5	1/13	88%	126%	15.6	5/15	44%	20%	20.1
6/08	25%	65%	10.1	10/10	76%	70%	12.3	2/13	79%	121%	15.5	6/15	50%	35%	18.8
7/08	33%	82%	9.9	11/10	76%	66%	12.4	3/13	68%	96%	15.6	7/15	55%	42%	18.0
8/08	27%	54%	10.6	12/10	63%	55%	13.0	4/13	66%	108%	15.7	8/15	77%	49%	17.8
9/08	44%	82%	8.5	1/11	51%	43%	13.4	5/13	66%	89%	17.2	9/15	75%	69%	16.2
10/08	81%	133%	6.6	2/11	46%	27%	13.0	6/13	69%	99%	16.7	10/15	57%	56%	17.0
11/08	101%	164%	6.3	3/11	55%	35%	12.4	7/13	67%	105%	17.6	11/15	74%	55%	19.4
12/08	105%	159%	6.4	4/11	51%	29%	12.5	8/13	78%	107%	17.4	12/15	84%	73%	18.4
1/09	116%	173%	5.9	5/11	56%	36%	11.3	9/13	73%	99%	18.0	1/16	91%	100%	16.7
2/09	153%	173%	7.1	6/11	59%	44%	11.5	10/13	54%	75%	18.6	2/16	97%	122%	18.0
3/09	135%	164%	7.1	7/11	68%	49%	11.1	11/13	53%	54%	19.3	3/16	93%	93%	18.9
4/09	116%	116%	8.1	8/11	78%	59%	10.2	12/13	36%	27%	19.9	4/16	102%	121%	18.0
5/09	109%	137%	9.2	9/11	92%	65%	8.7	1/14	52%	38%	18.5	5/16	100%	109%	19.3
6/09	113%	105%	8.7	10/11	70%	38%	10.3	2/14	50%	21%	19.5	6/16	105%	143%	18.4
7/09	96%	100%	9.8	11/11	76%	70%	10.9	3/14	51%	24%	17.8				
8/09	96%	136%	10.8	12/11	78%	75%	10.8	4/14	56%	36%	17.6				
9/09	87%	124%	11.2	1/12	74%	55%	12.0	5/14	43%	20%	17.6				
10/09	95%	143%	10.9	2/12	73%	44%	13.4	6/14	50%	27%	17.3				
11/09	89%	145%	12.1	3/12	68%	53%	13.5	7/14	54%	28%	16.4				

CONCLUSIONS

ERS's Portfolios



Greatly Reduces Losses

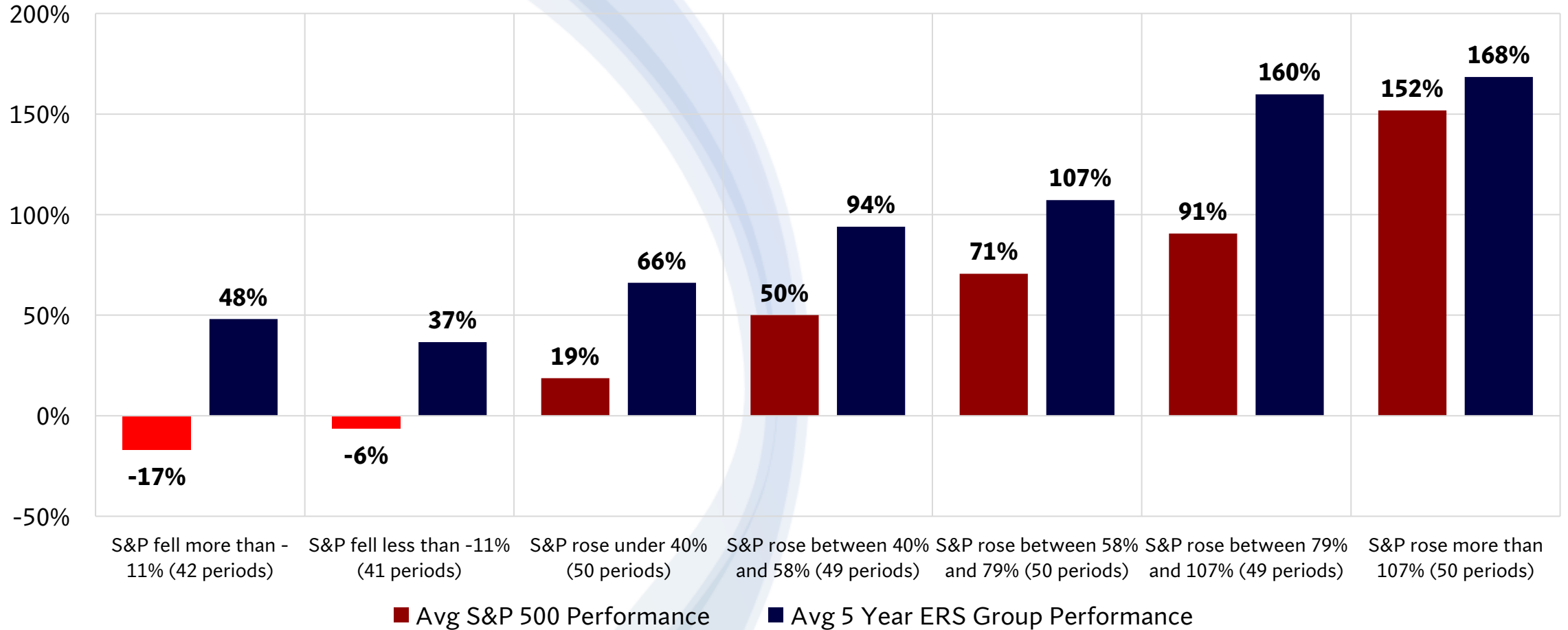


Greatly Improves Profitability

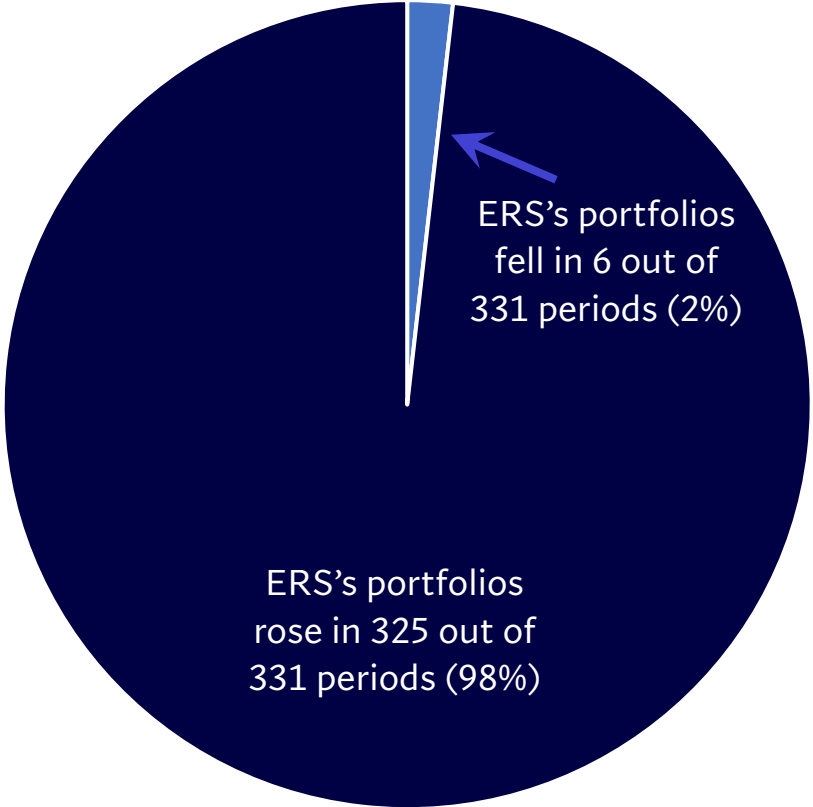
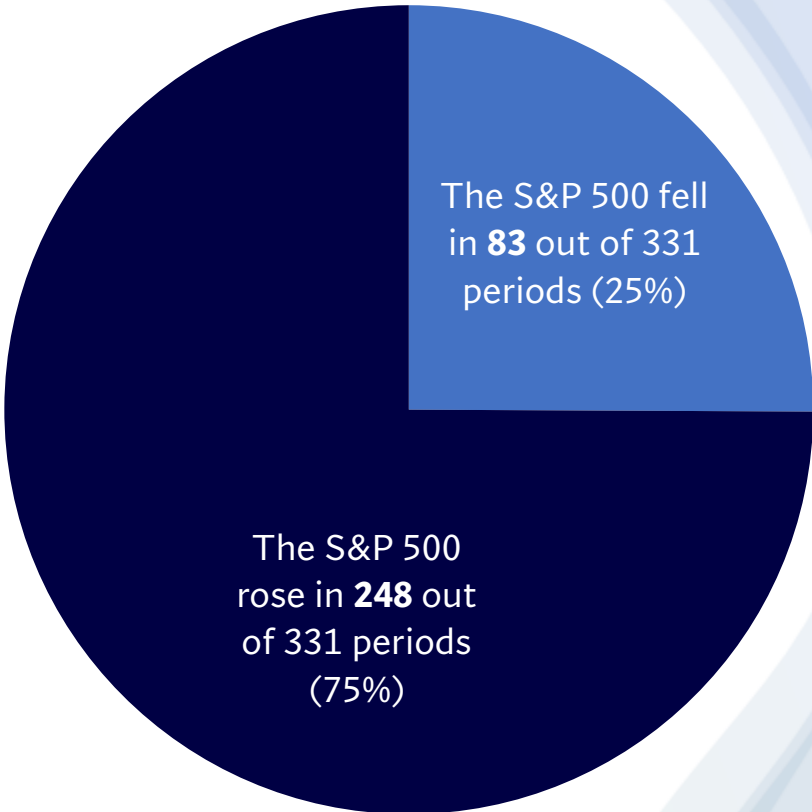


No other research that we know of is as reliable or as valuable.

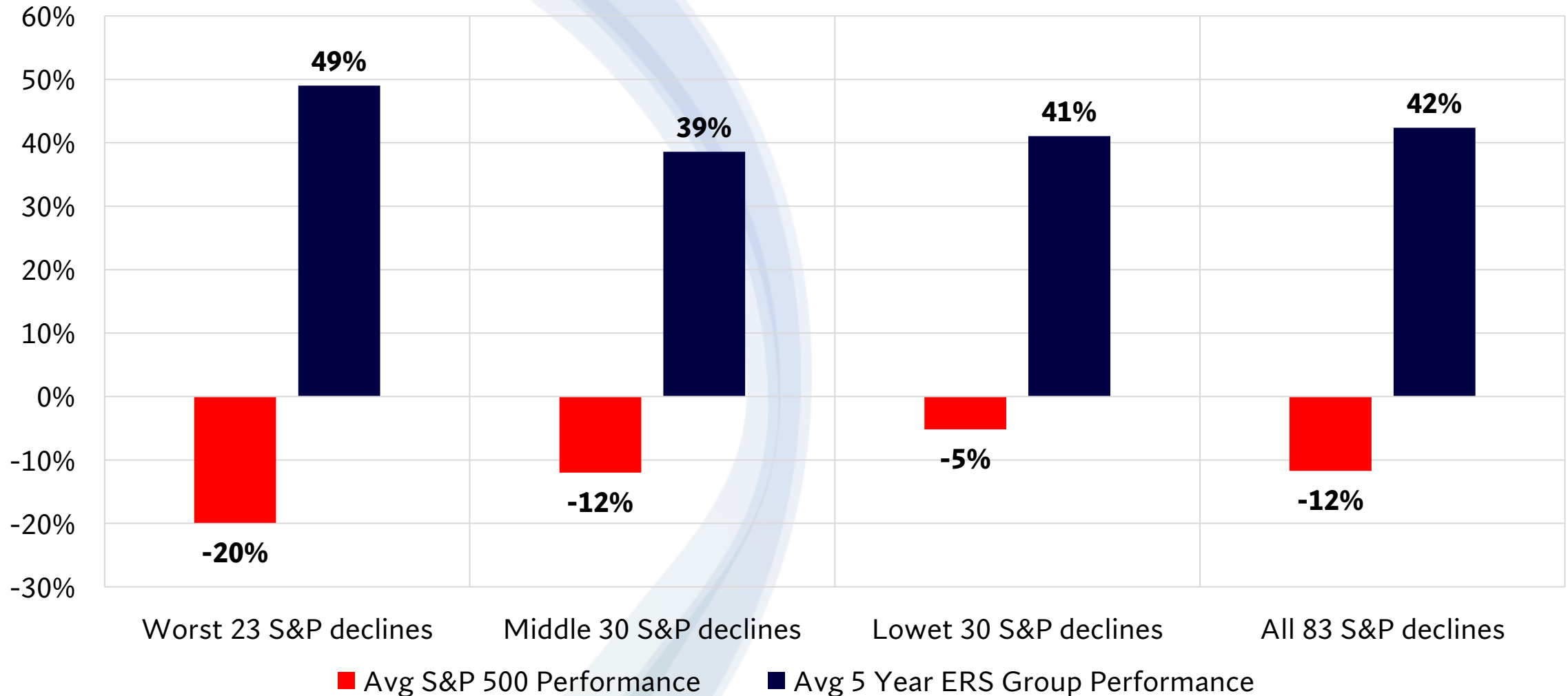
THE ALPHA OF ERS'S PORTFOLIOS BY 7 CATEGORIES



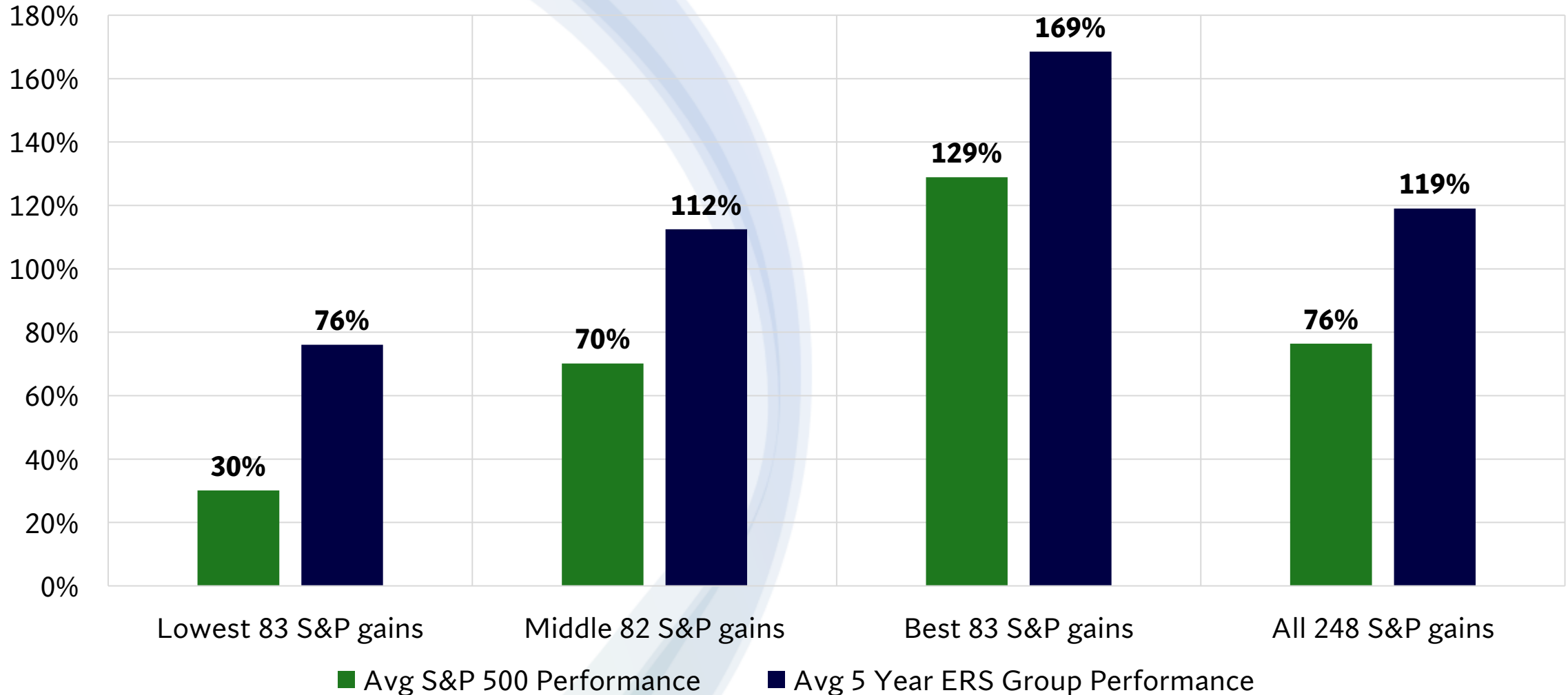
ERS's PORTFOLIOS PROVIDED CONSISTENT PROFITABILITY



IN THE 83 PERIODS WHEN THE S&P 500 FELL, ERS'S PORTFOLIOS OUTPERFORMED



IN THE 248 PERIODS WHEN THE S&P 500 ROSE, ERS'S PORTFOLIOS OUTPERFORMED



AVERAGE ALPHA OF ERS'S PORTFOLIOS

