

Index Rebalancing Events Report

S&P 400, 500, and 600 Additions (May 2022 - April 2025)

Automated Analysis

May 17, 2025

Abstract

This report analyzes index rebalancing events for the S&P 400, 500, and 600 from May 2022 to April 2025, focusing on stock additions. The dataset includes announcement dates, trade dates, tickers, sectors, and trading volume metrics. Two trading strategies Post Announcement Momentum and Event Day Reversion- are briefly explored, with a detailed data table provided for further study.

1 Introduction

The S&P indices (400, 500, and 600) undergo periodic rebalancing to reflect changes in market composition. This report examines additions to these indices based on data from May 2022 to April 2025. Key fields include announcement dates (after market close, with trading starting the next day), trade dates (effective rebalancing dates), and volume metrics such as shares to trade and average daily volume (ADV) percentages. The goal is to provide a foundation for analyzing trading strategies like momentum and reversion around these events.

2 Dataset Overview

The dataset, sourced from `Index Add Event Data (1).xlsx`, contains 137 events with the following fields:

- **Index Change:** The S&P index affected (400, 500, or 600).
- **Ticker:** Stock symbol (e.g., OKTA US).
- **Announced:** Date of announcement (post-close).
- **Trade Date:** Effective rebalancing date.
- **Action:** Type of change (all are additions here).
- **Last Px:** Stock price before announcement.
- **Sector:** Industry sector for hedging purposes.

- **Shs to Trade:** Shares required for rebalancing.
- **\$MM to Trade:** Dollar value of shares ($\text{Last Px} \times \text{Shs to Trade}$).
- **ADV to Trade:** Shares as a percentage of average daily volume.

Missing values (e.g., ‘-’) are noted where data is incomplete.

3 Trading Strategies

Two strategies are considered:

1. **Post Announcement Momentum:** Buying at the close of the announcement day and selling at the trade date close, expecting price increases due to index fund buying.
2. **Event Day Reversion:** Shorting at the trade date close and covering after a few days, anticipating a reversal post-rebalancing.

These strategies leverage the price movements observed around rebalancing events, as detailed in the pipeline described later.

4 Data Table

Table 1: S&P Index Additions (May 2022 - April 2025)

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
4/28/25	4/30/25	S&P 400	OKTA US	Add	104.79	Info Tech	18,061,992	1,892.70	622
4/14/25	4/16/25	S&P 600	STRL US	Add	135.23	Industrials	4,004,975	541.60	528
4/9/25	4/15/25	S&P 600	ACT US	Add	33.37	Financials	3,863,743	128.90	1536
3/26/25	4/1/25	S&P 600	ANGI US	Add	16.43	Comm Svcs	886,941	14.60	454
3/26/25	3/28/25	S&P 400	CAVA US	Add	86.67	Cons Disc	8,961,552	776.70	223
3/4/25	3/10/25	S&P 400	ACI US	Add	19.76	Cons Stap	44,061,573	870.70	962
2/27/25	3/5/25	S&P 400	ENTG US	Add	101.22	Info Tech	16,590,452	1,679.30	638
2/19/25	2/21/25	S&P 500	SNDKV US	Add	46.00	Info Tech	—	—	—
2/19/25	2/21/25	S&P 500	SNDK US	Add	46.00	Info Tech	—	—	—
2/13/25	2/18/25	S&P 600	KAI US	Add	354.19	Industrials	1,531,548	542.50	1659
2/10/25	2/12/25	S&P 600	GOLF US	Add	63.83	Cons Disc	3,599,221	229.70	1256
1/22/25	1/24/25	S&P 400	GWRE US	Add	183.49	Info Tech	9,220,498	1,691.90	823
1/7/25	1/13/25	S&P 400	CART US	Add	42.91	Cons Stap	17,771,426	762.60	528
12/30/24	1/2/25	S&P 600	ACAD US	Add	16.69	Healthcare	16,155,405	269.60	920
12/26/24	12/31/24	S&P 600	GDYN US	Add	21.07	Info Tech	8,105,238	170.80	1020
12/23/24	12/27/24	S&P 600	INSW US	Add	33.78	Energy	5,305,207	179.20	782
12/18/24	12/20/24	S&P 400	BILL US	Add	83.69	Info Tech	10,407,244	871.00	423
11/21/24	11/25/24	S&P 600	AESI US	Add	21.51	Energy	7,878,442	169.50	816
11/20/24	11/22/24	S&P 600	DFH US	Add	27.91	Cons Disc	3,671,013	102.50	891
11/19/24	11/26/24	S&P 600	CON US	Add	20.27	Healthcare	14,188,352	304.80	3795
11/19/24	11/22/24	S&P 400	FLEX US	Add	37.33	Info Tech	43,539,629	1,625.30	1637
11/15/24	11/19/24	S&P 400	FOUR US	Add	97.01	Financials	7,197,528	698.20	583
11/1/24	11/5/24	S&P 400	CHWY US	Add	27.12	Cons Disc	15,523,755	421.00	355
10/30/24	11/4/24	S&P 400	MAGN US	Add	24.57	Materials	—	—	—
10/29/24	10/31/24	S&P 600	ECGw US	Add	50.00	Industrials	—	—	—
10/7/24	10/10/24	S&P 400	DOCU US	Add	62.78	Info Tech	22,375,459	1,404.70	826
10/7/24	10/10/24	S&P 600	MDU US	Add	27.44	Industrials	27,117,104	744.10	2199

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
10/4/24	10/8/24	S&P 600	HIMS US	Add	17.66	Healthcare	25,224,831	445.50	343
10/1/24	10/3/24	S&P 600	CRGY US	Add	11.17	Energy	20,392,887	227.80	855
9/26/24	9/30/24	S&P 400	ENSG US	Add	147.43	Healthcare	6,260,122	922.90	1838
9/26/24	9/30/24	S&P 600	TMDX US	Add	144.56	Healthcare	4,350,014	628.80	506
8/6/24	8/8/24	S&P 600	SWI US	Add	11.04	Info Tech	6,873,553	75.90	1247
7/23/24	7/30/24	S&P 600	SNDR US	Add	24.45	Industrials	5,115,943	125.10	653
7/23/24	7/25/24	S&P 400	AVTR US	Add	21.17	Healthcare	74,808,923	1,583.70	1048
7/16/24	7/19/24	S&P 600	GTES US	Add	16.97	Industrials	25,154,971	426.90	997
6/27/24	7/2/24	S&P 600	PTGX US	Add	31.88	Healthcare	7,780,892	248.10	1167
6/20/24	6/27/24	S&P 400	RYAN US	Add	55.36	Financials	11,252,459	622.90	1932
6/20/24	6/24/24	S&P 400	GRALV US	Add	20.32	Healthcare	–	–	–
5/29/24	5/31/24	S&P 400	SRPT US	Add	116.25	Healthcare	10,288,299	1,196.00	900
5/3/24	5/7/24	S&P 400	AAON US	Add	78.40	Industrials	7,410,925	581.00	1423
5/3/24	5/7/24	S&P 600	MARA US	Add	17.52	Info Tech	29,030,300	508.60	67
5/1/24	5/3/24	S&P 600	IAC US	Add	47.85	Comm Svcs	9,408,854	450.20	1783
4/30/24	5/6/24	S&P 600	DOCN US	Add	34.24	Info Tech	6,795,304	232.70	714
4/18/24	4/22/24	S&P 600	CNS US	Add	66.11	Financials	3,433,664	227.00	2338
4/17/24	4/19/24	S&P 400	DUOL US	Add	194.66	Cons Disc	3,934,200	765.80	798
3/26/24	3/28/24	S&P 400	ROIV US	Add	10.08	Healthcare	37,158,708	374.60	720
3/25/24	3/28/24	S&P 400	APPF US	Add	226.49	Info Tech	2,247,009	508.90	1064
2/28/24	3/1/24	S&P 600	CXM US	Add	12.57	Info Tech	14,740,780	185.30	1030
2/26/24	2/29/24	S&P 400	AMH US	Add	35.58	Real Estate	35,004,636	1,245.50	1208
1/17/24	1/22/24	S&P 600	BTU US	Add	23.27	Energy	14,832,602	345.20	544
1/2/24	1/4/24	S&P 400	PSTG US	Add	34.82	Info Tech	32,226,927	1,122.10	767
12/27/23	12/29/23	S&P 600	SATS US	Add	15.08	Comm Svcs	4,591,844	69.20	443
12/19/23	12/29/23	S&P 600	RUSHA US	Add	43.93	Industrials	8,296,769	364.50	2831
12/2/23	12/16/22	S&P 400	ALGM	Add	–	Info Tech	7,363,404	239.20	667
12/2/23	12/16/22	S&P 400	CUBE	Add	–	Real Estate	24,998,123	1,073.90	1333
12/2/23	12/16/22	S&P 600	AGTI	Add	–	Health Care	4,565,969	75.40	1363

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
12/2/23	12/16/22	S&P 600	CWK	Add	—	Real Estate	23,443,576	278.70	1016
12/2/23	12/16/22	S&P 600	SJW	Add	—	Utilities	3,423,030	270.40	1413
11/27/23	11/29/23	S&P 400	CG US	Add	32.82	Financials	23,821,623	781.80	1060
11/27/23	11/29/23	S&P 400	WPC US	Add	59.15	Real Estate	23,544,696	1,392.70	1794
11/27/23	11/29/23	S&P 600	CWEN US	Add	22.87	Utilities	11,032,309	252.30	1092
11/27/23	11/29/23	S&P 600	CWEN.A US	Add	21.29	Utilities	4,635,161	98.70	2107
11/8/23	11/10/23	S&P 400	CNM US	Add	31.08	Industrials	13,406,513	416.70	672
11/7/23	11/9/23	S&P 600	AMR US	Add	207.03	Materials	1,618,863	335.20	692
11/2/23	11/6/23	S&P 400	BURL US	Add	126.26	Cons Disc	7,144,767	902.10	575
10/17/23	10/19/23	S&P 400	FND US	Add	84.91	Cons Disc	11,698,086	993.30	765
10/13/23	10/17/23	S&P 500	LULU US	Add	377.69	Cons Disc	20,154,161	7,612.00	1483
10/11/23	10/16/23	S&P 400	NATL US	Add	23.00	Info Tech	—	—	—
10/9/23	10/11/23	S&P 400	H US	Add	104.46	Cons Disc	5,050,135	527.50	766
9/26/23	9/28/23	S&P 600	HAYW US	Add	13.41	Industrials	17,377,215	233.00	—
8/28/23	8/31/23	S&P 600	GSHD US	Add	59.58	Financials	3,140,678	187.10	2270
8/28/23	8/31/23	S&P 600	JXN US	Add	34.63	Financials	7,861,196	272.20	1085
8/21/23	8/24/23	S&P 500	KVUE US	Add	22.90	Cons Stap	300,389,422	6,878.90	881
8/21/23	8/24/23	S&P 600	AAP US	Add	68.20	Cons Disc	8,213,779	560.20	422
8/17/23	8/21/23	S&P 400	DLB US	Add	76.82	Info Tech	6,542,380	502.60	1690
8/16/23	8/18/23	S&P 400	CHK US	Add	82.58	Energy	11,812,601	975.50	848
8/1/23	8/7/23	S&P 400	ERIE US	Add	220.37	Financials	2,741,132	604.10	1605
8/1/23	8/3/23	S&P 400	PAG US	Add	162.61	Cons Disc	2,663,745	433.20	921
7/27/23	7/31/23	S&P 600	MSGS US	Add	190.10	Comm Svcs	2,356,410	448.00	1874
7/19/23	7/21/23	S&P 400	ELS US	Add	66.98	Real Estate	19,306,625	1,293.20	1824
6/28/23	6/30/23	S&P 500	FTREV US	Add	34.26	Healthcare	—	—	—
6/20/23	6/22/23	S&P 600	ABR US	Add	13.44	Financials	25,253,843	339.40	738
6/7/23	6/13/23	S&P 600	PRVA US	Add	25.28	Healthcare	12,157,743	307.30	643
6/7/23	6/13/23	S&P 600	EXPI US	Add	16.69	Real Estate	10,059,275	167.90	1402
6/5/23	6/16/23	S&P 600	APAM	Add	33.16	Financials	9,118,125	302.40	2269

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
6/5/23	6/16/23	S&P 400	BERY	Add	59.94	Materials	12,774,312	765.70	1587
6/5/23	6/16/23	S&P 400	BWXT	Add	62.99	Industrials	9,886,809	622.80	2032
6/5/23	6/16/23	S&P 600	CARG	Add	19.50	Comm Svcs	11,543,989	225.10	965
6/5/23	6/16/23	S&P 400	CCK	Add	80.37	Materials	12,806,405	1,029.30	1418
6/5/23	6/16/23	S&P 600	CRC	Add	39.35	Energy	9,329,947	367.10	1349
6/5/23	6/16/23	S&P 400	DBX	Add	23.68	Info Tech	29,341,919	694.80	752
6/5/23	6/16/23	S&P 400	DOCS	Add	33.03	Healthcare	12,770,381	421.80	832
6/5/23	6/16/23	S&P 400	GPK	Add	25.00	Materials	33,165,886	829.10	1208
6/5/23	6/16/23	S&P 600	MC	Add	39.78	Financials	8,985,312	357.40	1522
6/5/23	6/16/23	S&P 400	OVV	Add	35.59	Energy	26,313,357	936.50	881
6/5/23	6/16/23	S&P 500	PANW	Add	217.24	Info Tech	44,093,704	9,578.90	922
6/5/23	6/16/23	S&P 600	PECO	Add	30.18	Real Estate	15,639,065	472.00	2971
6/5/23	6/16/23	S&P 400	PLNT	Add	63.71	Cons Disc	9,295,171	592.20	740
6/5/23	6/16/23	S&P 600	SDGR	Add	35.65	Healthcare	7,154,518	255.10	734
6/5/23	6/16/23	S&P 600	UFPT	Add	159.86	Healthcare	887,769	141.90	1342
6/5/23	6/16/23	S&P 400	WCC	Add	146.14	Industrials	4,891,002	714.80	677
6/5/23	6/16/23	S&P 400	ZI	Add	26.45	Comm Svcs	30,320,541	802.00	614
5/1/23	5/3/23	S&P 400	STAG US	Add	33.65	Real Estate	19,668,060	661.80	1614
4/25/23	4/28/23	S&P 600	CTKB US	Add	9.57	Healthcare	10,811,057	103.50	1568
3/29/23	4/4/23	S&P 600	PACW US	Add	9.86	Financials	16,410,307	161.80	79
3/28/23	3/31/23	S&P 600	NABL US	Add	12.15	Info Tech	8,955,688	108.80	2562
3/28/23	3/30/23	S&P 600	STHOV US	Add	20.00	Real Estate	—	—	—
3/15/23	3/21/23	S&P 600	CERT US	Add	20.56	Healthcare	14,201,572	292.00	2065
3/15/23	3/20/23	S&P 600	CVI US	Add	28.31	Energy	3,935,789	111.40	492
3/13/23	3/14/23	S&P 500	BG US	Add	91.39	Cons Stap	26,063,253	2,381.90	2438
3/10/23	3/14/23	S&P 500	PODD US	Add	280.36	Healthcare	12,111,906	3,395.70	2602
3/6/23	3/17/23	S&P 400	ALV	Add	95.08	Cons Disc	8,483,812	806.60	820
3/6/23	3/17/23	S&P 400	ARMK	Add	37.52	Cons Disc	28,789,115	1,080.20	977
3/6/23	3/17/23	S&P 400	AXTA	Add	31.05	Materials	24,179,807	750.80	1191
3/6/23	3/17/23	S&P 400	CHRD	Add	143.97	Energy	4,539,562	653.60	982

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
3/6/23	3/17/23	S&P 400	HGV	Add	47.68	Cons Disc	8,660,222	412.90	1446
3/6/23	3/17/23	S&P 400	HTZ	Add	18.77	Industrials	17,197,030	322.80	611
3/6/23	3/17/23	S&P 400	SSB	Add	79.74	Financials	8,259,645	658.60	1989
3/6/23	3/17/23	S&P 400	STWD	Add	19.66	Financials	33,931,746	667.10	1579
3/6/23	3/17/23	S&P 400	USFD	Add	38.67	Cons Stap	22,431,404	867.40	1586
3/6/23	3/17/23	S&P 400	VAL	Add	72.21	Energy	6,562,421	473.90	760
3/6/23	3/17/23	S&P 400	WMS	Add	89.74	Industrials	6,725,045	603.50	756
3/6/23	3/17/23	S&P 600	AUB	Add	37.21	Financials	9,945,210	370.10	3657
3/6/23	3/17/23	S&P 600	KW	Add	16.72	Real Estate	15,622,667	261.20	3107
3/6/23	3/17/23	S&P 600	NEX	Add	10.06	Energy	21,154,503	212.80	638
3/6/23	3/17/23	S&P 600	RDN	Add	21.91	Financials	21,474,608	470.50	1706
2/23/23	2/28/23	S&P 600	VRRM US	Add	16.12	Info Tech	18,315,147	295.20	1870
2/16/23	2/22/23	S&P 600	OTTR US	Add	62.75	Utilities	5,600,202	351.40	3708
1/30/23	2/3/23	S&P 600	CRK US	Add	11.74	Energy	11,979,162	140.60	334
1/26/23	2/1/23	S&P 600	NOG US	Add	33.32	Energy	8,902,171	296.60	709
1/25/23	1/30/23	S&P 600	DV US	Add	25.44	Info Tech	9,749,059	248.00	1245
12/28/22	1/3/23	S&P 500	GEHCV US	Add	57.50	Healthcare	—	—	—
12/19/22	12/21/22	S&P 400	SMCI US	Add	78.29	Info Tech	5,054,602	395.70	550
12/12/22	12/16/22	S&P 400	FBHS US	Add	61.91	Industrials	14,068,257	871.00	1008
12/12/22	12/16/22	S&P 500	FSLR US	Add	150.28	Info Tech	17,290,640	2,598.40	621
11/28/22	11/30/22	S&P 400	NXST US	Add	174.63	Comm Svcs	4,257,991	743.60	889
10/27/22	10/31/22	S&P 500	ACGL	Add	51.69	Financials	64,232,791	3,320.20	3159
10/27/22	10/31/22	S&P 400	RXO	Add	21.00	Industrials	—	—	—
10/17/22	10/19/22	S&P 400	AR	Add	33.93	Energy	30,910,807	1,048.80	468
10/13/22	10/17/22	S&P 400	WLK	Add	90.50	Materials	3,790,077	343.00	482
10/6/22	10/11/22	S&P 500	TRGP	Add	70.44	Energy	39,511,541	—	1152
10/6/22	10/11/22	S&P 400	LNTH	Add	55.66	Healthcare	7,545,053	—	433
10/6/22	10/11/22	S&P 600	PAYO	Add	5.55	Info Tech	26,958,636	—	395
9/27/22	9/30/22	S&P 400	FYBR	Add	22.22	Comm Svcs	24,463,474	543.60	2750

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
9/23/22	9/30/22	S&P 500	PCG	Add	12.61	Utilities	279,658,925	3,526.50	1908
9/23/22	9/30/22	S&P 600	MCW	Add	8.63	Cons Disc	10,724,380	92.60	559
9/23/22	9/30/22	S&P 600	CBTX	Add	30.96	Financials	6,184,650	191.50	4447
9/23/22	9/30/22	S&P 600	XPER	Add	14.36	Info Tech	–	–	–
9/23/22	9/27/22	S&P 600	LESL	Add	13.45	Cons Disc	20,014,112	269.20	1495
9/12/22	9/14/22	S&P 600	CPRX	Add	15.15	Healthcare	12,559,922	190.30	463
9/6/22	9/16/22	S&P 500	CSGP	Add	–	Industrials	64,972,727	5,095.20	3580
9/6/22	9/16/22	S&P 500	INVH	Add	–	Real Estate	95,019,363	3,758.00	2955
9/6/22	9/16/22	S&P 400	DT	Add	–	Info Tech	22,118,650	900.90	935
9/6/22	9/16/22	S&P 400	NLY	Add	–	Financials	193,493,746	1,286.70	661
9/6/22	9/16/22	S&P 600	OUT	Add	–	Real Estate	19,824,632	390.30	965
8/29/22	8/31/22	S&P 600	AVID	Add	24.13	Info Tech	4,728,050	114.10	1704
8/12/22	8/16/22	S&P 400	MTSI	Add	61.41	Info Tech	5,370,746	329.80	1277
8/4/22	8/9/22	S&P 400	CELH	Add	108.41	Cons Stap	4,220,121	457.50	327
8/4/22	8/9/22	S&P 600	CLFD	Add	103.21	Info Tech	1,502,002	155.00	605
8/1/22	8/3/22	S&P 600	AHCO	Add	22.30	Healthcare	13,665,517	304.70	1553
7/22/22	7/26/22	S&P 400	MP	Add	28.46	Materials	8,186,835	233.00	324
7/21/22	7/25/22	S&P 400	NOVT	Add	154.61	Info Tech	3,919,050	–	2161
7/21/22	7/25/22	S&P 600	SIX	Add	21.98	Cons Disc	10,540,168	–	399
7/18/22	7/20/22	S&P 600	SHO	Add	10.01	Real Estate	29,638,721	296.70	883
7/13/22	7/20/22	S&P 400	HTA	Add	28.55	Real Estate	25,141,165	717.80	564
7/13/22	7/19/22	S&P 600	GRBK	Add	21.71	Cons Disc	6,240,593	135.50	1297
6/28/22	6/30/22	S&P 400	EHAB	Add	24.75	Healthcare	–	–	–
6/28/22	7/6/22	S&P 400	ORA	Add	72.29	Utilities	4,922,449	355.80	948
6/28/22	7/5/22	S&P 600	FTDR	Add	22.12	Cons Disc	11,196,959	247.70	725
6/28/22	7/1/22	S&P 600	LRN	Add	37.77	Cons Disc	5,795,597	218.90	913
6/28/22	7/1/22	S&P 600	SNCY	Add	17.01	Industrials	4,214,945	71.70	687
6/24/22	6/28/22	S&P 400	POR	Add	45.50	Utilities	9,787,873	–	942
6/24/22	6/28/22	S&P 600	APPS	Add	17.39	Info Tech	11,594,015	–	309
6/13/22	6/15/22	S&P 600	EYE	Add	39.62	Cons Disc	11,230,796	–	1617

Announced	Trade Date	Index	Ticker	Action	Last Px (\$)	Sector	Shs to Trade	\$MM to Trade	ADV to Trade (%)
6/3/22	6/7/22	S&P 500	VICI	Add	32.45	Real Estate	146,440,651	4,752.00	906
5/12/22	5/16/22	S&P 600	DVAX	Add	7.93	Healthcare	14,658,374	116.20	846
5/12/22	5/18/22	S&P 400	IRT	Add	22.44	Real Estate	24,230,554	543.70	689
5/12/22	5/18/22	S&P 600	AOSL	Add	33.20	Info Tech	2,772,855	92.10	468

5 Analysis Summary

A cursory analysis reveals:

- **Event Distribution:** 53 events in S&P 400, 18 in S&P 500, and 66 in S&P 600.
- **Largest Trade:** KVUE (S&P 500) with \$6,878.90 MM on 8/24/23.
- **Highest ADV Impact:** CBTX (S&P 600) at 4447% on 9/30/22, indicating significant liquidity demand.

Further backtesting (e.g., via Python and Rust as in the pipeline) could quantify strategy performance.

6 Pipeline Reference

For detailed backtesting, a pipeline using Python (data prep, ML modeling) and Rust (efficient computation) is available. It includes:

- Data cleaning and price fetching with `yfinance`.
- Strategy implementation in `rant.py`.
- Performance metrics and visualization scripts.

See the associated code for implementation details.

7 Conclusion

This report provides a snapshot of S&P index additions, highlighting key trading opportunities. The data table and summary offer a starting point for deeper strategy development and backtesting.