

1Q 2024 EARNINGS SEASON OBSERVATIONS

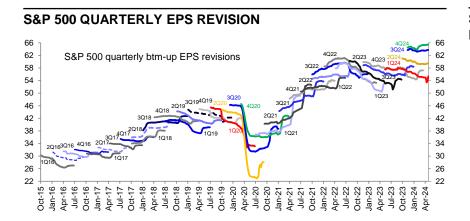


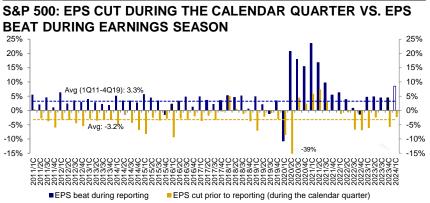
- This data reflects the 215 S&P 500 companies or 52% of index earnings that have reported as of Thursday April 25th.
- Bottom-up blended 1Q EPS is \$55.33 (actual results for companies reported and consensus estimates for the rest), +5.0% year-over-year (y/y). Our standing 1Q EPS estimate is \$57. Blended sales growth is +2.4% y/y. Blended pro-forma net margin is 12.4%, vs. 11.6% in 4Q23 and 11.8% a year ago.
- S&P 500 ex the Great 8's 2024 consensus EPS have been cut by 8.7% since 2023 start (cut by 2.2% ytd). The Great 8's 2024 consensus EPS have been raised by 20.5% since 2023 start (raised by 5.8% ytd).
- S&P 500 has been in a profit recession in the last two years outside of the Great 8. S&P EPS growth was +2.1% in the last two years (4Q23 vs. 4Q21).
 S&P EPS ex the Great 8 was down by -0.9% 4Q24 vs. 4Q21. The great 8 had a +12.4% EPS growth in the same period.
- 74% of reporting companies beat on earnings per share (EPS) and 21% missed (the rest in-line), with an aggregate surprise of +8.5%, +9.3% ex Financials. Historic average EPS beat is +3.3% (2011-2019 average). 45% beat on sales and 31% missed, with an aggregate surprise of +0.4%, +0.2% ex Financials. Our measures of beat / miss ratios and magnitudes are based on analysts' consensus estimates at the end of the fiscal quarter for each company.
- Bottom-up consensus estimate for 2024 S&P EPS is now \$244.01. Our estimate is \$243 (\$242 = \$57 + \$59 +\$62 +\$64), up about 9.3% y/y. This assumes a very "soft recession" with very strong EPS growth from Tech and Communications.
- By sector, 1Q blended EPS y/y growth is strongest at Communication Services (+43% y/y), Utilities (24%), Tech (22%), Consumer Discretionary (20%) and Financials (10%). EPS y/y growth is weakest at Health Care (-29% y/y), Energy (-23%) and Materials (-23%).
- 1Q blended sales y/y growth is strongest at Tech (+7.5% y/y), Communication Services (6.6%), Health Care (6.0%), Real Estate (5.4%) and Consumer discretionary (4.0%). Sales y/y growth is weakest at Materials (-4.3% y/y), Energy (-3.6%), Utilities (-3.3%) and Financials (-2.6%).
- Valuations at the S&P are reasonable if excluding the Great 8 (AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA).
 S&P 500 excluding the Great 8 PE on 2024 consensus EPS is 18.6x, PE of the Great 8 is 29.6x. Overall S&P PE is 20.9x.
- We see the Great 8 at risk to overly demanding PEs, we see the rest of the S&P 500 at risk to a cyclical downturn. Both are at risk to higher Treasury yields.

Source: DWS Investment GmbH as of 4/25/2024, for illustrative purposes only. It is not possible to invest directly in an index. This information should not be construed as a recommendation of any specific security.

S&P 500 QUARTERLY EPS REVISION

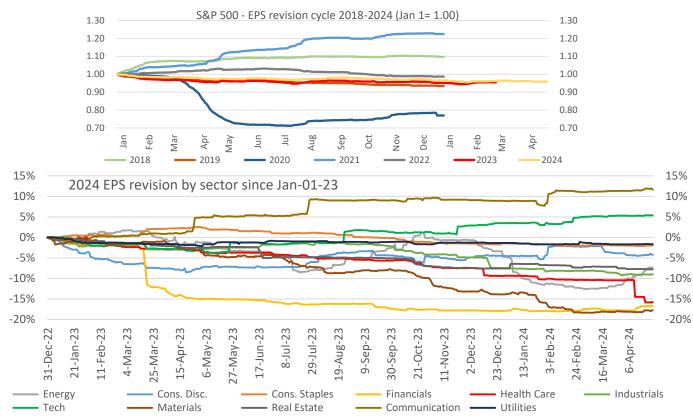






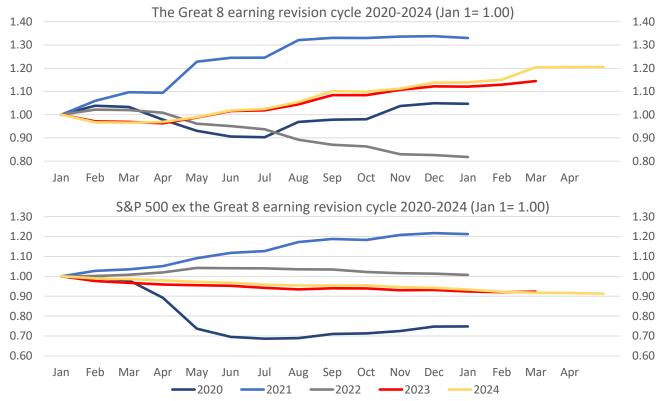
S&P 500 ANNUAL EPS REVISION





S&P 500 AND THE GREAT 8 EPS REVISIONS





The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: IBES, Factset, DWS Investment GmbH as of 4/25/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

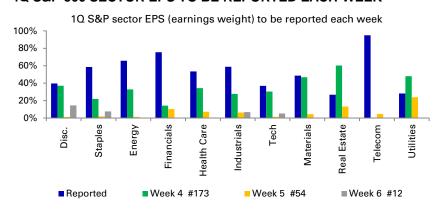
1Q 2024 S&P 500 EARNINGS SEASON SCHEDULE



4Q S&P 500 EPS TO BE REPORTED EACH WEEK



4Q S&P 500 SECTOR EPS TO BE REPORTED EACH WEEK



1Q 2024 EARNINGS SEASON SUMMARY STATISTICS



			1Q24	Summar	y (Based on r	eported o	ompanie	s)		
	% of EPS	# Cos	EPS (%		EPS	EPS	Sales (%		Sales	Sales
	reported	reported	% beat	% miss	surprise (%)	y/y (%)	% beat	% miss	surprise (%)	y/y (%)
S&P 500	52.1%	215	74%	21%	8.5%	6.7%	45%	31%	0.4%	2.6%
S&P 500 ex. Financials & Real Est	47.4%	159	79%	18%	9.3%	7.0%	45%	32%	0.2%	3.8%
S&P 500 ex. Energy	54.6%	208	74%	22%	8.4%	7.3%	43%	32%	0.4%	2.9%
S&P ex. Tech	56.4%	192	72%	21%	8.8%	3.5%	45%	31%	0.4%	2.1%
S&P ex. Energy, Financials & Real Est	50.2%	152	79%	18%	9.1%	7.9%	43%	33%	0.1%	4.2%
Communication Services	93.4%	10	100%	0%	14.3%	43.5%	40%	40%	0.3%	8.6%
Consumer Discretionary	39.6%	23	74%	22%	9.9%	8.1%	39%	30%	-0.9%	2.9%
Consumer Staples	53.7%	14	86%	7%	8.6%	7.9%	57%	29%	0.1%	2.7%
Energy	17.5%	7	71%	0%	14.8%	-15.3%	86%	14%	2.3%	-4.6%
Financials	73.7%	48	63%	31%	7.2%	6.4%	48%	27%	1.7%	-2.7%
Health Care	41.1%	22	100%	0%	8.2%	-41.7%	77%	14%	1.3%	4.1%
Industrials	58.4%	42	71%	24%	4.0%	7.5%	29%	33%	-0.6%	3.1%
Information Technology	36.4%	23	87%	17%	7.2%	29.4%	39%	35%	1.0%	7.8%
Materials	43.5%	11	55%	36%	4.0%	-11.1%	55%	36%	1.4%	0.2%
Real Estate	26.7%	8	50%	25%	0.0%	-2.0%	13%	38%	-1.6%	0.8%
Utilities	28.1%	7	43%	57%	6.5%	13.0%	14%	86%	-6.9%	-8.8%
Great 8 *	56.7%	6	83%	17%	11.7%	43.0%	67%	17%	0.0%	14.9%
S&P ex Great 8	50.9%	210	73%	21%	7.6%	-0.9%	44%	31%	0.5%	1.2%

^{* #} Beat, # miss and weighted surprise % is based on EPS and sales estimate as of 3/31/2024 (as of 3/1/2024 for pre-season reporters)

EPS is considered beat or miss when the difference between actual and estimate as of 3/31/2024 is more than \$0.01 (3/1/2024 for pre-season reporters)

Sales is considered beat or miss when the difference between actual and estimate as of 3/31/2024 is more than \$20 million (3/1/2024 for pre-season reporters)

S&P 500 EPS GROWTH BY SECTOR



1Q24 is blended with actual for reported and consensus for the rest

_	1	20	19				202	20			1	202	1			1	202	22				202	23			
EPS growth (y/y)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24
S&P 500	1.5%	-0.8%	1.1%	3.5%	1.4%	-11.6%	-30.6%	-7.5%	3.0%	-9.2%	48.6%	92.5%	41.7%	32.6%	49.0%	9.5%	9.1%	4.7%	-2.4%	6.1%	0.7%	-3.2%	6.6%	8.1%	2.9%	5.0%
S&P 500 ex. Financials & Real Est	-0.3%	-3.8%	0.2%	1.9%	-0.7%	-5.0%	-25.9%	-8.6%	-0.6%	-7.1%	36.6%	81.6%	44.4%	39.3%	47.1%	16.5%	15.9%	8.5%	-1.2%	10.9%	-0.6%	-5.9%	3.9%	9.2%	1.4%	3.9%
S&P 500 ex. Energy	2.7%	-0.2%	3.4%	6.4%	3.2%	-11.2%	-24.5%	-3.6%	6.5%	-5.2%	49.7%	78.6%	34.1%	24.8%	42.0%	3.8%	-1.5%	-3.1%	-6.8%	-1.0%	-1.1%	3.5%	12.1%	11.6%	6.4%	7.7%
S&P 500 ex. Tech	3.5%	0.4%	2.1%	1.4%	1.2%	-16.2%	-37.3%	-10.1%	-0.6%	-14.8%	50.4%	105.2%	42.0%	35.0%	53.9%	8.6%	11.2%	6.3%	-0.3%	6.6%	3.0%	-5.0%	4.7%	3.9%	1.9%	1.0%
S&P ex. Energy, Fin & Real Est	1.2%	-3.2%	3.1%	5.4%	1.5%	-4.1%	-17.4%	-3.7%	3.7%	-1.6%	37.6%	65.1%	34.6%	28.9%	38.1%	9.0%	2.2%	-1.2%	-6.6%	1.9%	-3.1%	2.2%	10.4%	13.8%	5.6%	7.4%
S&P ex. Energy, Fin, Real Est, Healthcare	-1.0%	-6.9%	1.8%	4.3%	-0.6%	-6.7%	-23.4%	-6.7%	2.9%	-4.3%	40.9%	81.4%	36.9%	29.7%	41.5%	6.5%	0.3%	-1.6%	-7.5%	0.5%	0.9%	11.3%	19.0%	21.9%	13.7%	17.9%
Communication Services	9.2%	6.9%	1.2%	9.2%	2.8%	-9.2%	-17.8%	-0.9%	9.7%	3.7%	53.9%	68.4%	41.5%	17.8%	39.6%	-3.9%	-13.6%	-21.8%	-27.1%	-17.3%	-10.6%	14.5%	45.8%	53.0%	24.4%	43.0%
Consumer Discretionary	12.0%	4.8%	2.9%	3.0%	1.5%	-48.5%	-71.7%	-3.4%	-19.0%	-30.4%	167.3%	370.7%	20.7%	91.2%	97.5%	-25.3%	-7.2%	15.9%	-13.8%	-5.4%	56.3%	53.5%	41.6%	35.2%	45.2%	19.7%
Cons. Disc. ex. Auto	14.8%	6.7%	3.8%	14.9%	4.8%	-38.4%	-58.9%	-15.7%	-33.8%	-31.4%	105.0%	225.7%	37.8%	108.4%	96.1%	-35.5%	-18.1%	9.1%	-26.0%	-13.2%	83.0%	61.2%	54.6%	64.4%	63.2%	31.5%
Cons. Disc. ex. Broadline Retail	3.3%	4.4%	5.6%	2.4%	-0.4%	-53.8%	-92.8%	-18.8%	-38.8%	-46.1%	165.6%	1985.9%	42.2%	92.3%	121.7%	16.2%	26.3%	22.6%	33.0%	28.6%	23.3%	25.9%	22.8%	6.1%	18.8%	4.7%
Cons. Disc. ex. Auto & Broadline Retail	4.4%	6.6%	7.1%	16.4%	3.1%	-42.4%	-81.6%	-35.3%	-56.9%	-49.7%	80.6%	569.0%	78.9%	125.0%	126.0%	20.1%	17.0%	16.2%	25.3%	27.8%	30.2%	25.6%	31.7%	25.1%	27.6%	12.6%
Consumer Staples	-0.3%	-0.1%	3.2%	3.7%	1.7%	4.4%	1.9%	9.5%	9.4%	7.9%	19.6%	16.4%	6.6%	7.1%	12.6%	4.3%	-3.6%	-0.9%	-2.5%	-3.9%	-2.4%	4.0%	3.5%	2.8%	6.7%	2.1%
Energy	-24.6%	-13.1%	-37.3%	-42.7%	-30.5%	-22.4%	-169.3%	-109.9%	-102.1%	-113.1%	10.0%	248%	1883%	12514%	-1228%	255.9%	303.1%	144.7%	61.7%	157.9%	22.4%	-48.0%	-32.6%	-22.6%	-25.8%	-22.9%
Financials	7.4%	10.6%	4.3%	11.4%	9.6%	-35.4%	-49.7%	-3.3%	18.0%	-17.5%	117.5%	163.4%	34.5%	12.4%	62.8%	-13.6%	-15.7%	-12.1%	-9.4%	-12.6%	7.0%	9.5%	22.0%	4.5%	10.4%	10.0%
Health Care	10.0%	12.2%	8.7%	10.0%	9.9%	4.6%	2.8%	8.0%	7.1%	7.9%	27.5%	25.7%	27.3%	26.1%	27.5%	16.9%	8.7%	0.1%	-3.5%	6.6%	-14.6%	-26.3%	-17.7%	-14.5%	-19.7%	-28.7%
Industrials	-4.0%	-30.9%	-1.0%	-12.7%	-11.9%	-19.7%	-76.3%	-47.4%	-28.8%	-45.7%	4.8%	442.5%	84.3%	42.0%	83.1%	9.8%	24.7%	18.1%	43.3%	24.5%	52.5%	21.6%	14.6%	7.4%	21.2%	6.2%
Industrials ex. Aerospace & Defense	-9.4%	-24.5%	-0.6%	-5.2%	-7.4%	-16.8%	-75.9%	-53.3%	-31.3%	-43.2%	2.1%	320.7%	103.6%	55.9%	98.1%	9.7%	34.7%	28.1%	27.0%	29.0%	60.1%	21.3%	8.6%	5.5%	20.1%	3.4%
Industrials ex. Transportation	9.1%	-15.0%	1.6%	-11.2%	-7.0%	-14.2%	-37.0%	-12.9%	5.1%	-20.8%	24.3%	108.9%	26.0%	6.3%	30.2%	17.1%	10.0%	7.1%	37.4%	14.0%	17.6%	16.0%	22.1%	11.3%	16.9%	8.3%
Industrials ex. Aerospace & Defense and T	7.1%	3.2%	3.4%	3.1%	2.9%	-7.5%	-29.9%	-7.8%	12.3%	-6.4%	27.4%	51.8%	23.9%	11.3%	29.0%	18.9%	17.6%	17.4%	14.4%	16.6%	16.2%	14.1%	14.6%	9.9%	14.4%	5.3%
Information Technology	-7.1%	-6.0%	-3.4%	11.9%	2.5%	11.4%	2.9%	4.4%	16.3%	16.7%	41.7%	52.6%	40.3%	24.8%	32.2%	13.3%	-0.4%	-1.8%	-9.9%	4.0%	-8.3%	5.0%	15.3%	24.1%	7.0%	22.3%
Materials	-12.7%	-20.5%	69.7%	-13.0%	-10.7%	-7.8%	-35.0%	-13.4%	14.2%	-5.9%	50.6%	142.3%	96.9%	71.9%	91.1%	51.9%	21.5%	-7.9%	-20.7%	8.6%	-22.7%	-26.9%	-18.6%	-19.7%	-22.5%	-22.8%
Real Estate	3.4%	1.4%	3.5%	-0.9%	1.5%	-1.8%	-12.7%	-6.1%	1.7%	-4.1%	8.7%	29.7%	18.6%	10.2%	15.1%	16.8%	10.7%	10.5%	9.2%	12.3%	-2.2%	-0.1%	-0.7%	0.4%	0.4%	0.2%
Utilities	-0.2%	1.2%	7.2%	16.4%	6.0%	3.5%	6.3%	-2.6%	-5.6%	-1.6%	-4.7%	8.9%	11.1%	-0.5%	0.5%	25.8%	-4.2%	-8.5%	-4.5%	1.8%	-28.3%	-4.8%	6.4%	28.3%	2.1%	23.7%

Note: Based on S&P 500 current index constituents compiled as of 3/31/2024. Source: Factset, DWS Investment GmbH as of 4/25/2024, for illustrative purposes only. It is not possible to invest directly in an index.

S&P 500 SALES GROWTH BY SECTOR



1Q24 is blended with actual for reported and consensus for the rest

			2019	1				2020	1				2021				202		1			202				
Sales growth (y/y)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24
S&P 500	5.8%	5.2%	4.0%	7.8%	5.7%	-1.8%	-10.3%	-2.3%	-0.5%	-3.7%	9.5%	21.8%	13.9%	15.2%	15.0%	13.6%	12.2%	13.0%	9.0%	11.9%	9.1%	7.1%	5.0%	6.2%	6.8%	2.4%
S&P 500 ex. Financials & Real Est	3.2%	2.9%	1.9%	6.2%	3.6%	-2.8%	-11.9%	-2.5%	1.4%	-4.0%	11.9%	26.6%	17.4%	16.5%	19.0%	15.4%	13.3%	12.5%	8.0%	11.6%	6.8%	4.6%	4.0%	6.1%	6.0%	3.2%
S&P 500 ex. Energy	3.7%	3.4%	3.5%	7.7%	4.5%	-1.6%	-6.7%	0.3%	4.0%	-1.0%	12.3%	20.6%	13.5%	11.6%	14.2%	10.3%	6.7%	8.7%	7.2%	8.1%	9.1%	10.7%	7.1%	8.2%	8.9%	3.0%
S&P 500 ex. Tech	3.8%	3.4%	2.5%	6.5%	4.2%	-3.0%	-12.3%	-2.8%	0.1%	-5.1%	10.5%	24.9%	15.8%	15.7%	16.9%	13.5%	12.3%	12.4%	9.0%	11.6%	9.2%	6.8%	4.9%	6.4%	7.1%	1.9%
S&P ex. Energy, Fin & Real Est	3.5%	3.3%	3.2%	7.6%	4.4%	-2.0%	-7.4%	0.7%	4.7%	-1.1%	12.6%	22.1%	13.7%	11.8%	15.7%	11.8%	7.4%	8.8%	7.3%	8.1%	8.1%	9.7%	6.7%	7.9%	9.1%	3.9%
S&P ex. Energy, Fin, Real Est, Healthcare	0.6%	0.4%	0.0%	6.1%	1.5%	-5.3%	-10.4%	-2.0%	2.5%	-4.5%	13.5%	23.0%	12.9%	10.9%	16.0%	10.6%	6.3%	9.9%	8.3%	7.8%	9.5%	11.6%	6.9%	8.1%	11.3%	3.2%
Communication Services	13.3%	15.9%	11.8%	4.4%	9.9%	4.1%	-7.7%	0.0%	-7.2%	-1.1%	8.4%	22.4%	13.2%	22.6%	19.9%	8.0%	7.5%	5.6%	4.5%	2.4%	5.0%	3.3%	5.9%	6.5%	5.0%	6.6%
Consumer Discretionary	4.7%	5.6%	6.0%	3.5%	4.5%	-3.2%	-14.7%	4.6%	10.8%	6.4%	23.0%	38.9%	12.9%	12.8%	14.4%	10.8%	12.8%	15.5%	11.0%	11.3%	9.0%	9.4%	7.1%	5.6%	8.1%	4.0%
Cons. Disc. ex. Auto	7.3%	6.9%	8.5%	8.2%	7.2%	-1.2%	-4.2%	5.0%	11.9%	12.0%	27.7%	33.6%	18.7%	14.9%	15.9%	10.7%	9.5%	11.5%	7.8%	8.1%	6.9%	6.1%	6.7%	6.5%	7.0%	5.3%
Cons. Disc. ex. Broadline Retail	2.4%	3.0%	2.6%	-0.7%	1.3%	-9.4%	-26.6%	-3.0%	1.3%	-1.2%	16.9%	44.4%	12.1%	14.3%	11.8%	12.2%	15.0%	16.0%	12.2%	12.1%	9.0%	8.9%	5.2%	2.5%	6.8%	1.2%
Cons. Disc. ex. Auto & Broadline Retail	4.6%	3.6%	4.4%	3.9%	3.4%	-9.6%	-17.7%	-5.5%	-0.9%	3.3%	20.9%	37.6%	20.4%	18.3%	13.2%	12.7%	10.9%	10.2%	7.5%	7.7%	5.7%	3.9%	3.9%	2.4%	4.7%	2.0%
Consumer Staples	2.7%	2.1%	3.3%	3.0%	2.7%	6.1%	1.6%	3.5%	6.4%	7.9%	5.7%	13.1%	11.9%	10.8%	11.2%	10.2%	9.4%	9.2%	6.0%	6.6%	5.0%	2.7%	3.3%	2.5%	1.2%	1.7%
Energy	0.6%	-0.5%	-8.8%	-6.1%	-3.7%	-10.8%	-54%	-34%	-32%	-33%	4.1%	110.1%	72.7%	90.0%	66.0%	57.3%	77.1%	48.7%	14.2%	47.3%	-3.9%	-28.8%	-15.7%	-9.6%	-16.5%	-3.6%
Financials	4.9%	3.4%	5.1%	8.3%	5.3%	0.1%	-2.6%	-2.1%	0.0%	-0.6%	11.4%	12.3%	11.9%	9.8%	5.0%	1.0%	1.7%	7.6%	6.2%	7.6%	16.1%	17.8%	9.7%	9.9%	8.1%	-2.6%
Health Care	14.5%	14.7%	15.5%	13.1%	15.6%	9.2%	2.7%	9.8%	12.1%	10.3%	10.1%	19.6%	15.9%	14.4%	14.9%	15.5%	10.6%	5.6%	4.4%	8.9%	4.0%	4.3%	6.1%	7.2%	2.6%	6.0%
Industrials	5.2%	-0.2%	1.0%	2.0%	2.9%	-6.9%	-23.2%	-15.4%	-8.9%	-10.2%	0.0%	29.6%	18.4%	15.0%	15.5%	14.4%	14.7%	14.0%	11.6%	12.2%	7.5%	3.9%	1.1%	3.2%	4.2%	2.0%
Industrials ex. Aerospace & Defense	4.3%	3.3%	2.7%	4.3%	3.2%	-6.3%	-26.6%	-15.4%	-8.6%	-12.3%	4.0%	38.3%	25.4%	23.2%	21.1%	21.1%	20.6%	17.6%	11.6%	15.4%	8.2%	2.7%	1.4%	2.8%	3.9%	0.5%
Industrials ex. Transportation	5.9%	-1.4%	0.5%	2.4%	1.7%	-7.1%	-16.5%	-10.2%	-5.3%	-5.3%	2.6%	21.2%	9.5%	5.9%	10.6%	6.2%	6.4%	10.0%	11.8%	7.7%	7.9%	7.6%	3.6%	5.0%	5.8%	2.6%
Industrials ex. Aerospace & Defense and T	5.0%	3.5%	3.1%	6.7%	1.5%	-6.3%	-17.7%	-6.2%	-2.1%	-5.3%	11.0%	28.2%	14.2%	12.0%	15.8%	11.4%	10.9%	13.6%	11.8%	10.1%	9.2%	7.6%	5.5%	5.5%	6.2%	0.5%
Information Technology	0.3%	-0.4%	0.7%	5.7%	0.2%	3.6%	5.6%	0.2%	10.7%	11.2%	22.8%	21.5%	24.6%	15.9%	17.9%	13.6%	8.4%	7.2%	-2.1%	7.8%	-2.7%	0.1%	2.9%	7.9%	-0.7%	7.5%
Materials	0.2%	-16.2%	-13.8%	-15.1%	0.8%	-16.3%	-15.1%	-6.9%	-5.3%	-3.3%	10.7%	36.9%	33.6%	39.4%	28.8%	27.2%	19.3%	7.7%	-3.7%	11.9%	-7.6%	-12.7%	-10.4%	-5.2%	-19.6%	-4.3%
Real Estate	5.2%	5.4%	6.4%	4.8%	5.5%	5.1%	-6.1%	-3.5%	2.0%	-1.5%	2.9%	19.1%	16.6%	18.4%	12.6%	20.8%	17.2%	14.4%	8.1%	14.7%	6.1%	6.6%	6.6%	8.2%	6.8%	5.4%
Utilities	1.0%	0.7%	0.5%	0.1%	7.0%	-5.7%	-5.2%	-2.4%	-23.5%	-9.8%	10.1%	6.0%	5.3%	51.9%	21.7%	15.6%	27.9%	27.0%	16.1%	11.0%	12.9%	-5.9%	-5.7%	-7.7%	-1.6%	-3.3%

Note: Based on S&P 500 current index constituents compiled as of 3/31/2024. Source: Factset, DWS Investment GmbH as of 4/25/2024, for illustrative purposes only. It is not possible to invest directly in an index.

S&P 500 NET MARGINS BY SECTOR



1Q24 is blended with actual for reported and consensus for the rest

																1					,					
			2019					2020					2021		i)22		i)23		i	ĺ
Net margins	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24
S&P 500	11.3%	11.4%	11.9%	11.3%	11.2%	10.2%	8.9%	11.2%	11.5%	10.5%	13.6%	13.8%	13.7%	13.1%	13.4%	12.9%	13.2%	12.5%	11.6%	12.5%	11.8%	11.8%	12.6%	11.6%	11.9%	12.4%
S&P 500 ex. Financials & Real Est	9.9%	10.1%	10.8%	10.2%	9.9%	9.6%	8.4%	10.1%	10.0%	9.5%	11.8%	12.2%	12.5%	11.9%	11.8%	11.7%	12.2%	11.7%	10.6%	11.5%	10.7%	10.8%	11.6%	10.8%	10.8%	11.1%
S&P 500 ex. Energy	11.9%	12.0%	12.5%	11.9%	11.7%	10.6%	9.7%	11.9%	12.2%	11.1%	14.2%	14.4%	14.1%	13.4%	13.8%	13.1%	13.0%	12.3%	11.4%	12.4%	11.7%	12.0%	12.7%	11.7%	12.0%	12.6%
S&P 500 ex. Tech	10.3%	10.5%	10.8%	9.9%	10.2%	8.9%	7.5%	10.0%	9.9%	9.1%	12.2%	12.5%	12.3%	11.5%	12.1%	11.5%	12.1%	11.4%	10.2%	11.3%	10.7%	10.6%	11.2%	9.9%	10.5%	10.8%
S&P ex. Energy, Fin & Real Est	10.4%	10.6%	11.3%	10.8%	10.4%	10.1%	9.4%	10.8%	10.7%	10.3%	12.4%	12.7%	12.8%	12.2%	12.2%	11.9%	11.8%	11.3%	10.3%	11.3%	10.5%	10.9%	11.6%	10.8%	10.8%	11.2%
S&P ex. Energy, Fin, Real Est, Healthcare	10.4%	10.5%	11.6%	11.1%	10.5%	10.2%	8.9%	10.9%	11.1%	10.4%	12.6%	13.1%	13.2%	12.8%	12.6%	11.9%	12.1%	11.5%	10.6%	11.5%	10.8%	11.9%	12.7%	11.9%	11.6%	12.9%
Communication Services	16.1%	16.2%	15.5%	16.1%	15.2%	14.0%	14.3%	15 3%	19.0%	15.8%	19.9%	19.8%	19.1%	18.1%	18.4%	17 5%	15.0%	13.2%	11.6%	14.0%	14.1%	16.0%	17.7%	16.4%	16.1%	18.7%
Consumer Discretionary	7.3%	7.9%	8.4%	7 2%	7.4%	3.7%	2.5%	7.4%	5.1%	4.7%	8.0%	8.3%	8.0%	8.4%	8.0%	5.1%	6.5%	7.7%	6.3%	6.5%	7.1%	9.0%	10.1%	7.9%	8.6%	7.9%
Cons. Disc. ex. Auto	8.2%	9.0%	9.4%	8.9%	8.6%	4.9%	3.7%	7.1%	5.1%	5.0%	7.7%	9.0%	8.3%	8.9%	8.0%	4.1%	6.3%	7.8%	5.8%	6.1%	6.7%	9.4%	11.1%	8.8%	9.1%	8.4%
Cons. Disc. ex. Broadline Retail	7.4%	8.5%	9.5%	8.0%	8.1%	3.6%	0.6%	7.5%	4.7%	4.2%	7.9%	8.6%	9.5%	7.4%	8.1%	7.8%	9.1%	9.8%	8.5%	9.0%	8.5%	10.2%	11.2%	8.6%	9.7%	8.5%
Cons. Disc. ex. Auto & Broadline Retail	8.6%	10.3%	11.3%	10.8%	9.9%	5.2%	2.0%	7.1%	4.4%	4.4%	7.4%	9.7%	10.6%	7.9%	8.2%	7.4%	9.8%	10.7%	8.7%	9.3%	8.6%	11.4%	13.2%	10.3%	10.9%	9.5%
Consumer Staples	6.7%	7.3%	7.5%	7.1%	7.0%	6.6%	7.3%	7.8%	7.3%	7.0%	7.4%	7.6%	7.4%	7.0%	7.1%	6.9%	6.6%	6.7%	6.3%	6.3%	6.7%	7.0%	6.9%	6.7%	6.9%	6.7%
Energy	4.8%	5.8%	5.5%	4.7%	5.3%	4.1%	-8.7%	-0.8%	-0.1%	-1.0%	4.6%	6.5%	9.0%	9.5%	7.6%	10.6%	14.7%	14.6%	13.0%	13.1%	12.9%	10.1%	11.0%	10.7%	11.1%	10.3%
Financials	18.8%	18.8%	17.6%	16.9%	18.1%	12.0%	9.8%	17.1%	19.9%	14.9%	23.5%	22.9%	20.4%	19.8%	22.8%	19.4%	18.3%	16.3%	16.5%	18.0%	17.6%	16.7%	17.7%	15.4%	18.0%	19.6%
Health Care	10.4%	10.6%	10.3%	9.7%	9.9%	9.9%	10.8%	10.4%	9.5%	9.9%	11.7%	11.5%	11.5%	10.5%	11.1%	11.8%	11.2%	10.7%	9.6%	10.7%	9.5%	7.8%	8.2%	7.5%	8.3%	6.4%
Industrials	8.2%	7.0%	10.0%	8.5%	8.7%	7.1%	2.2%	5.8%	6.4%	5.2%	7.3%	9.1%	9.3%	7.9%	8.3%	6.6%	9.7%	9.3%	9.9%	8.9%	9.2%	11.1%	10.3%	10.2%	10.2%	9.4%
Industrials ex. Aerospace & Defense	8.8%	8.7%	11.4%	10.3%	9.3%	8.1%	3.2%	6.1%	7.4%	5.7%	8.0%	9.9%	10.5%	9.9%	9.3%	7.0%	10.7%	11.0%	11.0%	10.1%	10.1%	12.5%	11.6%	11.3%	11.5%	10.4%
Industrials ex. Transportation	9.0%	7.6%	9.4%	7.9%	9.7%	8.3%	6.1%	8.7%	8.4%	8.2%	9.6%	10.5%	10.4%	8.7%	10.0%	10.1%	10.7%	9.8%	10.5%	10.3%	10.7%	11.3%	11.4%	11.1%	11.1%	11.2%
Industrials ex. Aerospace & Defense and T	10.6%	10.9%	11.4%	10.6%	11.3%	10.9%	10.3%	11.0%	11.6%	11.1%	12.3%	12.6%	13.2%	12.5%	12.6%	12.5%	13.1%	13.1%	12.7%	13.1%	13.0%	13.7%	14.2%	13.5%	13.9%	13.8%
Information Technology	20.7%	21.1%	22.2%	23.4%	21.1%	21.6%	20.0%	22.7%	24.2%	21.6%	24.6%	25.0%	25.3%	25.6%	24.0%	24.3%	22.7%	22.9%	23.2%	22.9%	22.5%	23.5%	25.4%	26.5%	24.3%	25.6%
Materials	7.6%	11.2%	10.4%	9.4%	8.4%	8.9%	8.6%	9.6%	11.3%	8.2%	12.1%	15.1%	14.0%	13.5%	12.1%	14.0%	14.7%	11.4%	10.6%	11.3%	11.3%	12.0%	10.2%	8.9%	10.6%	9.3%
Real Estate	34.7%	34.2%	33.8%	33.8%	33.7%	33.2%	33.2%	34.2%	35.2%	34.0%	36.3%	37.2%	35.9%	34.0%	35.9%	36.8%	36.9%	36.4%	36.1%	36.8%	35.6%	36.2%	35.5%	34.6%	36.0%	33.8%
Utilities	13.2%	12.7%	16.6%	11.0%	12.8%	15.0%	14.4%	17.2%	15.1%	14.8%	14.6%	16.2%	19.0%	10.1%	12.9%	16.0%	12.2%	13.8%	8.5%	11.9%	10.4%	12.5%	15.7%	11.9%	12.5%	13.3%

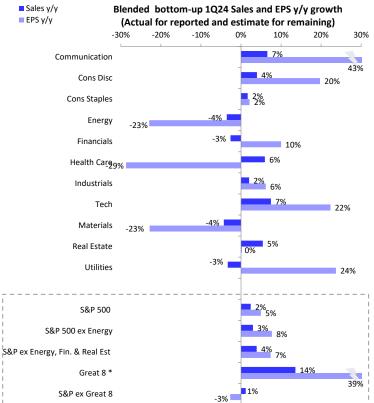
S&P net margins surged to record high of 13.8% in 2021, led by digital firms, and consumer goods producers/retailers. We see some cyclical set-backs in net margins. S&P 500 net margins are cyclical, but not mean reverting, they have been rising since mid-1990s for structural reasons.

Note: Blue represents net margin expansion y/y, Orange represents net margin contraction y/y.

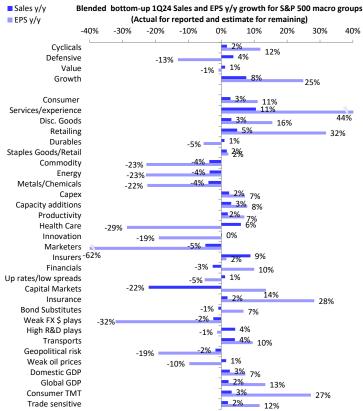
Based on S&P 500 current index constituents compiled as of 3/31/2024.

S&P 500 EPS AND SALES Y/Y GROWTH BY SECTOR





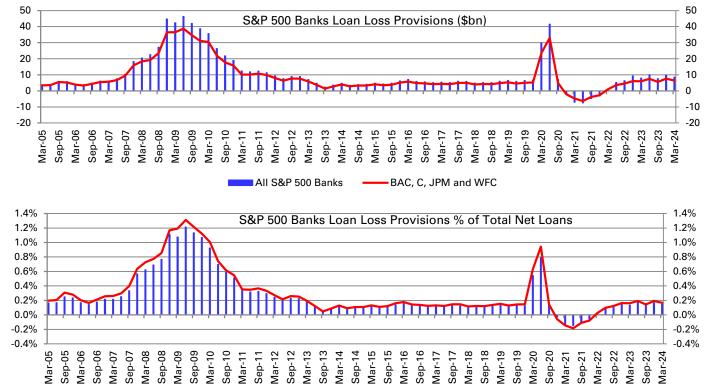
S&P 500 EPS AND SALES Y/Y GROWTH FOR MACRO GROUPS DWS



Source: Factset, DWS Investment GmbH as of 4/25/2024, for illustrative purposes only.

S&P 500 BANKS LOAN LOSS PROVISIONS





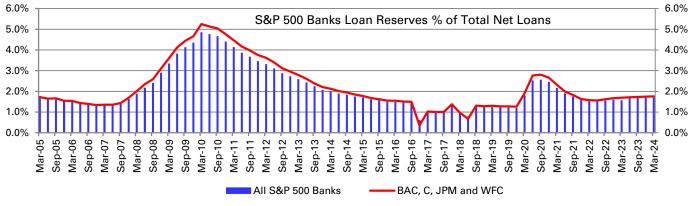
BAC, C, JPM and WFC

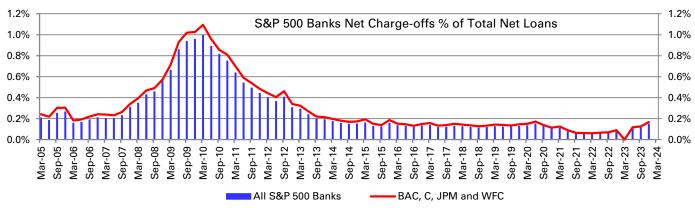
Source: Factset, DWS Investment GmbH as of 4/25/2024, for illustrative purposes only. It is not possible to invest directly in an index.

All S&P 500 Banks

S&P 500 BANKS LOAN RESERVES AND CHARGE-OFFS







S&P 500 EPS MODEL



												Botton	-up Cons	ensus (IBE	ES)		DWS '	View		Normalize	d 2024
	2014A			2017A				2021A	2022A	2023A	y/y	2024E	у/у	2025E	у/у	2024E	y/y	2025E	y/y	(\$)	% of 2023
S&P 500 EPS (historical index)	\$118.82	\$117.46	\$118.10	\$132.00	\$161.93	\$162.93	\$139.72	\$208.12	\$218.09	\$221.36	1.5%										
S&P 500 EPS (current constituents)	\$116.65	\$117.00	\$117.29	\$129.20	\$155.28	\$159.34	\$141.80	\$206.93	\$217.33	\$222.24	2.3%	\$244	9.8%	\$278	13.9%	\$243	9.3%	\$260	7.0%	\$243	100%
Sector (\$ bn)																					
Communication Services	66.3	76.8	88.9	96.9	121.2	127.9	131.9	183.9	143.9	173.1	20.3%	203.6	17.6%	230.9	13.4%	213.0	23.0%	226.4	6.3%	211.4	99%
Consumer Discretionary	57.7	67.6	75.3	79.6	94.8	93.1	62.3	121.6	110.5	156.8	41.9%	174.1	11.1%	200.0	14.9%	168.9	7.7%	179.4	6.2%	172.7	102%
Consumer Staples	84.0	82.8	85.5	89.8	96.9	98.0	105.3	118.0	111.9	124.5	11.3%	128.1	3.0%	138.4	8.0%	121.5	-2.4%	126.4	4.0%	119.2	98%
Energy	94.2	39.5	10.4	36.9	69.5	49.1	-6.6	78.7	200.4	141.5	-29.4%	137.8	-2.6%	149.4	8.4%	140.0	-1.0%	142.2	1.6%	141.0	101%
Financials	184.3	200.0	203.8	213.3	262.6	276.6	225.6	363.2	308.5	333.7	8.2%	363.8	9.0%	401.9	10.5%	356.0	6.7%	381.2	7.1%	345.6	97%
Health Care	137.9	152.9	157.8	172.2	189.0	207.0	227.0	293.1	308.5	244.0	-20.9%	263.5	8.0%	314.3	19.3%	285.0	16.8%	308.5	8.2%	281.7	99%
Industrials	100.6	104.1	98.1	107.1	130.8	113.9	61.2	112.2	135.9	161.5	18.8%	172.5	6.8%	197.5	14.5%	172.0	6.5%	181.3	5.4%	173.6	101%
Information Technology	162.2	168.2	176.4	206.4	237.4	231.9	264.1	345.5	355.2	375.1	5.6%	443.1	18.1%	522.6	17.9%	445.0	18.6%	500.2	12.4%	459.0	103%
Materials	24.6	23.4	22.5	28.7	36.2	34.1	32.5	61.5	63.9	48.4	-24.3%	47.4	-2.0%	54.6	15.3%	48.0	-0.7%	49.7	3.5%	46.7	97%
Real Estate	22.9	24.2	28.4	31.7	35.7	37.1	37.0	44.0	51.6	54.0	4.6%	54.8	1.5%	58.2	6.3%	52.5	-2.8%	53.4	1.7%	50.8	97%
Utilities	32.9	33.1	35.7	37.1	40.9	45.0	46.9	49.6	50.9	52.6	3.3%	58.9	11.9%	63.8	8.3%	58.3	10.9%	61.3	5.1%	60.3	103%
S&P 500	967.7	972.4	982.8	1099.8	1314.9	1313.6	1187.3	1771.3	1841.1	1865.1	1.3%	2047.8	9.8%	2331.5	13.9%	2060.2	10.5%	2210.0	7.3%	2061.9	100%
S&P ex. Energy (\$bn)	873.5	932.9	972.4	1062.8	1245.4	1264.6	1193.8	1692.5	1640.7	1723.6	5.1%	1909.9	10.8%	2182.1	14.3%	1920.2	11.4%	2067.8	7.7%	1920.9	100%
S&P ex. Tech (\$bn)	805.5	804.2	806.4	893.3	1077.5	1081.7	923.2	1425.7	1485.9	1489.9	0.3%	1604.6	7.7%	1808.9	12.7%	1615.2	8.4%	1709.8	5.9%	1602.9	99%
S&P 500 Sales/Share (historical index)	\$1,163	\$1,127	\$1,151	\$1,232	\$1,339	\$1,415	\$1,362	\$1,567	\$1,753	\$1,872	6.8%										
S&P 500 Non-GAAP Net Margin	10.2%	10.4%	10.3%	10.7%	12.1%	11.5%	10.3%	13.3%	12.4%	11.8%											

S&P 500 EPS	Year	1Q	2Q	3Q	4Q
2019A	163	39	41	41	42
2020A	140	33	28	38	42
2021A	210	49	53	54	54
2022A	222	55	58	56	53
2023E	223	53	54	58	57
2024E	243	57	59	62	65

S&P 500 EPS historical constituents represents the earnings per share (EPS) of S&P 500 index constituents at the time, while S&P 500 EPS current constituents represents the earnings per share of index constituents as of the date the data was compiled 3/31/2024.

Source: Factset, DWS Investment GmbH as of 4/25/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index. No representation or warranty is made by DWS as to the reasonableness or completeness of the forward looking statements or to any other financial information contained herein.

S&P 500 SECTOR AND INDUSTRY ALLOCATION



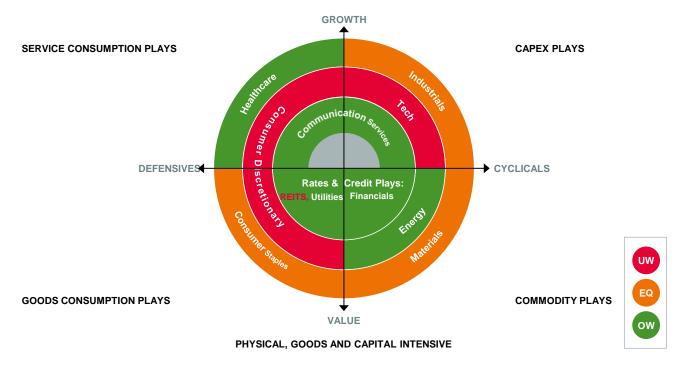
	Market	Allocated	Sector	2022	2023	2024	Overweight	2022	2023	2024	Equal weight	2022	2023	2024	Underweight	2022	2023	2024	Sector OW	8.89%
Over-	12.2%		Health Care	17.0	21.2		Biotechnology	12.9	17.6	16.	Health Care Providers & Services	16.9	15.7		Life Sciences Tools & Services	24.6	28.7		Sector UW	-8.89%
	12.270	16.0%	Health Care	17.0	21.2	10.4	Health Care Equipment & Supplies	26.4	26.6	24.	7	10.3	15.7	14.5	Elie Gaerices 100is a Gervices	24.0	20.7	20.0	Industry OW	18.05%
weight							Pharmaceuticals	14.3	24.1	17.								ľ	Industry UW	-18.05%
	13.3%	14.9%	Financials	18.8	17.0	16.3	Banks	13.0	11.2	12.0					Capital Markets	19.9	20.6	18.7	industry CVV	-18.03/6
	10.070		· marroraro				Insurance	20.1	16.6	13.9	9				Consumer Finance	12.7	14.5	14.1	Macro tilts:	
															Financial Services	29.0	25.2	23.5		
	9.0%	10.1%	Communication	27.4	21.6	18.5	Diversified Telecommunication Servi	7.0	7.6	8.2	Wireless Telecommunication Servi	79.6	23.5	18.6	Media	10.6	10.2	10.0	Cyclicals	-4.57%
			Services				Entertainment	83.1	33.3	23.								l	Defensive	4.57%
	0.00/	0.40/					Interactive Media & Services	39.0	27.7	22.									Value (Financial+Energy)	2.59%
	2.3%	3.4%	Utilities	19.2	18.1	16.8	Electric Utilities	20.3	18.3	16.9	Gas Utilities Independent Power & Renewable B	20.6 10.3	18.5 9.8	17.6 9.1				ŀ	Growth	-0.32%
											Multi-Utilities	17.2	9.8 18.0	16.8					Growth ex Health Care	-4.15%
											Water Utilities	27.4	24.5	23.3					Consumer	-3.45%
	4.2%	5.2%	Energy	9.3	12.6	13.4	Energy Equipment & Services	23.2	15.7	13.8	Oil Gas & Consumable Fuels	8.9	12.4	13.3					Services/experience	0.02%
							0, 1,		0.00										Disc. Goods	-3.53%
Equal-	8.9%	8.9%	Industrials	27.7	23.6	21.9	Aerospace & Defense	40.1	35.8		Construction & Engineering	40.3	36.8		Air Freight & Logistics	12.5	17.4		Retailing	-2.27%
weight							Electrical Equipment	30.7	30.7	27.0	Machinery	22.8	18.0	18.1	Building Products	21.8	27.3	25.5	Durables	-1.26%
							Industrial Conglomerates	15.7	12.6	10.8	3				Commercial Services & Supplies	41.8	43.1	39.8	Staples Goods/Retail	0.06%
							Passenger Airlines	19.3	7.2	7.:					Ground Transportation	60.7	29.8	28.3	Commodity	1.13%
							r assenger Amines	15.5	1.2	/								ı	Energy	1.02%
															Professional Services	29.4	27.6	25.2	Metals/Chemicals	0.11%
															Trading Companies & Distributors	27.7	22.9	21.8	Сарех	6.71%
	6.2%	6.2%	Consumer Staples	22.0	20.9	20.3	Beverages	25.5	22.9	21.9	Consumer Staples Distribution & R	25.7	24.7	23.7	Tobacco	12.6	12.4	12.3	Capacity additions	3.58%
							Household Products	28.6	26.4	25.2	Food Products	14.9	15.6	15.6	6			i	Productivity	3.13%
							Personal Care Products	53.2	23.8	23.	3								Health Care	3.83%
																			Innovation	3.45%
	2.4%	2 /10/	Materials	15.9	20.5	21.2					Chemicals	17.1	21.5	21.6	Construction Materials	50.0	34.1	29.8	Marketers	1.86%
	2.4/0	2.4 /0	Materiais	10.0	20.0	22					Metals & Mining	10.8	16.7		Containers & Packaging	14.3	17.0	16.7	Insurers	-0.10%
	0.007	4.00/	D 15 1	40.0	47.0	40.0	OI-II I DEIT-	17.3	47.0	40	3				Health Care REITs			18.0	Financials	1.57%
Under-	2.2%	1.8%	Real Estate	16.9	17.0	16.6	Specialized REITs	17.3	17.3	16.	Hotel & Resort REITs	10.6	10.0	9.6	Industrial REITs	18.9	19.4	19.6	Up rates/low spreads	0.66%
weight											Office REITs	44.0	44.5	40.0	Residential REITs	20.0 17.7	18.7 16.6	19.6	Capital Markets	-0.53%
											Retail REITs	11.3	11.5				37.4	37.4	·	
	40.00/	0.70/	0	39.7	27.7	26.0	Automobile Components	13	12.1	0.1	Retail REITS 3 Distributors	12.7 16.5	13.2 17.1		Real Estate Mgmt. & Development Automobiles	27.6 20.4	21.0	23.1	Insurance	1.44%
	10.2%		Consumer	39.7	21.1	26.0	Automobile Components	13	12.1	9.8	Hotels Restaurants & Leisure	16.5				11.2		12.1	Bond Substitutes	0.73%
			Discretionary								Leisure Products	14.6	24.9 22.6		Household Durables Broadline Retail	-2033	11.3 55.1	42.4	Weak FX \$ plays	0.15%
			Automobiles	20.4	21.0	23.1					Leisure Products	14.0	22.0	21.2	Multiline Retail	-2033	55.1	42.4	High R&D plays	1.80%
				-2033	55.1										Specialty Retail	21.1	22.2	21.1	Transports	-0.78%
			Broadline Retail CD ex Auto &	-2033 27.0	21.9	42.4 21.0	1								Textiles Apparel & Luxury Goods	25.2	32.8	29.9	Geopolitical risk	1.89%
	20.40/	24.40/		35.0	32.8		Communications Equipment	18.2	16.5	15 (9 Software	42.2	36.4	21.0	Electronic Equipment	25.2	25.9		Weak oil prices	-0.12%
	29.1%	24.4%	Information	35.0	32.0	21.9	IT Services	22.7	20.6		Technology Hardware Storage & P	26.6	27.1		Semiconductors	43.4	40.9	29.9	Inflation shock	-0.04%
Aggregate	PE: DWS	View	Technology				Overweight	20.3	19.7		7 Equalweight	21.8	22.1		Underweight	29.3	27.4		Stagflation Protection	4.08%
Aggi egali	S&P 500	VICW					Overweight	5048	15.7	-17.	2022, 2023& 2024 EPS	217.33	223.00		2022, 2023 & 2024 PE	23.2	22.6		Domestic GDP	-3.04%
-	Jul 300							50-0			Bottom-up Consensus EPS	217.33	223.30		Bottom-up Cons. PE	23.2	22.6		Global GDP	-5.74%
									-						2022, 2023 & 2024 Ex Energy PE	23.5	23.5	21.3	Consumer TMT	-0.28%
															Btm-up Cons. Ex Energy PE	24.9	23.5	21.4	Trade sensitive	-2.38%

Source: Factset, DWS Investment GmbH as of 4/25/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 SECTOR STRATEGY: PER KEY MACRO PLAYS



DIGITAL, SERVICES AND HIGH R&D



Note: OW – Overweight; EQ – Equalweight; UW – Underweight. Source: DWS Investment GmbH as of April 2024. It is not possible to invest directly in an index.

S&P 500 FAIR VALUE BY SECTOR



Assuming a ~5.50% real cost of equity (CoE) for overall S&P 500

	Market Value (\$bn)	Current 2024 PE	2024E Earnings (\$bn)	Normal Ratio	Normal 2024E Earnings	Accounting Quality Adjustment	Fully Adjusted Earnings	Net Debt / Market Cap	FCF / EPS	Real CoE	Steady State Value	Growth Premium	2024 Start Fair Value (\$bn)	2024E Dividend Yield	2024 End Fair Value (\$bn)	PE on Normal 2024E EPS	2024 End Upside %	2024 End Upside vs. S&P 500
Communication Services	3,944	18.5	213.0	99%	211.4	-7%	196.6	11%	0.83	5.50%	3,574	20%	4,288	0.9%	4,592	21.7	16%	17%
Consumer Discretionary	4,388	26.0	168.9	102%	172.7	-6%	162.3	10%	0.74	5.50%	2,951	31%	3,875	1.0%	4,144	24.0	-6%	-5%
Automobiles	578	23.1	25.0	95%	23.8	-8%	21.9	30%	0.99	6.50%	336	40%	471	0.5%	511	21.5	-12%	-11%
Broadline (Internet) Retail	1,570	42.4	37.0	120%	44.4	-5%	42.2	0%	0.18	5.25%	803	75%	1,406	0.0%	1,514	34.1	-4%	-3%
ex. Auto & Broadline (Internet) Retail	2,240	21.0	106.9	98%	104.5	-6%	98.3	12%	0.75	5.43%	1,812	10%	1,998	1.5%	2,127	20.3	-5%	-4%
Consumer Staples	2,464	20.3	121.5	98%	119.2	-6%	112.1	14%	0.84	5.25%	2,135	5%	2,242	2.8%	2,354	19.7	-5%	-4%
Energy	1,871	13.4	140.0	101%	141.0	-10%	126.9	13%	0.91	6.25%	2,030	-18%	1,665	2.1%	1,776	12.6	-5%	-4%
Financials	5,798	16.3	356.0	97%	345.6	-7%	319.8		1.10	6.25%	5,117	-3%	4,963	1.8%	5,309	15.4	-8%	-8%
Banks	1,500	12.0	125.0	95%	118.8	-7%	110.4		1.11	7.50%	1,473	-10%	1,325	2.7%	1,421	12.0	-5%	-5%
Health Care	5,244	18.4	285.0	99%	281.7	-8%	259.2	9%	1.14	5.40%	4,800	15%	5,520	1.4%	5,878	20.9	12%	13%
Industrials	3,758	21.9	172.0	101%	173.6	-7%	161.4	14%	0.88	5.50%	2,935	10%	3,228	1.6%	3,435	19.8	-9%	-8%
Information Technology	12,434	27.9	445.0	103%	459.0	-3%	445.2	2%	0.95	5.25%	8,481	35%	11,449	0.9%	12,238	26.7	-2%	-1%
Materials	1,017	21.2	48.0	97%	46.7	-8%	42.9	15%	0.89	6.00%	716	5%	751	1.4%	805	17.2	-21%	-20%
Real Estate	874	16.6	52.5	97%	50.8	-3%	49.2	33%	1.80	5.75%	856	5%	899	3.8%	939	18.5	7%	8%
Utilities	979	16.8	58.3	103%	60.3	-7%	56.0	86%	-0.64	5.75%	975	0%	975	3.5%	1,021	16.9	4%	5%
S&P 500 (\$ bn)	42,772	20.8	2060.2	100%	2061.9	-6.3%	1931.7			5.56%	34,569	15.3%	39855	1.4%	42,490	20.6	-1%	0%
S&P 500 Index (\$/sh)	5048	20.8	243.0	100%	243.0	-6.2%	228.0	9%	0.93	5.50%	4145	15.6%	4790	1.4%	5098	21.0	1%	0%



Source: IBES, DWS Investment GmbH as of 4/25/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index. No representation or warranty is made by DWS as to the reasonableness or completeness of the forward looking statements or to any other financial information contained herein.

S&P 500 EPS historical constituents represents the earnings per share (EPS) of S&P 500 index constituents at the time, while S&P 500 EPS current constituents represents the earnings per share of index constituents as of the date the data was compiled 3/31/2024.

The estimated 2024 year end upside is on absolute valuation basis of each sector, not on relative sector valuation basis.

S&P 500 INTRINSIC VALUATION MODEL



Normal 2024E economic profit per share

S&P 500 Capitalized EPS Valuation		S&P 500 Dividend Discount Model		S&P 500 Long-term EPS & DPS Growth		S&P 500 Cost of Equity & Fair Book Multiple	
DWS 2024E S&P 500 EPS	\$243.00	DWS 2024E S&P 500 DPS	\$76.00	DWS 2024E S&P 500 aggregate ROE	22.1%	Fair long-term nominal return on S&P 500 index	8.00%
		2024E dividend payout ratio	31%	2023E end S&P 500 book value per share	\$1,100	Components of estimated fair S&P 500 return:	
DWS "normal 2024E" S&P 500 EPS	\$243.00	DWS "normal 2024E" S&P 500 DPS	\$76.00	DWS "normal 2024E" S&P 500 aggregate ROE	20.7%	+ Long-term real risk free interest rate	1.75%
"Normal 2024E" EPS / 2024 EPS	100%	Normal dividend payout ratio	33%			+ Long-term fair S&P 500 equity risk premium*	3.75%
				S&P EPS retained for true reinvestment	43%	= Long-term real S&P 500 cost of equity	5.50%
Accounting quality adjustment to pro forma EPS	-\$15.00	EPS directed to net share repurchases	\$55.00	Estimated ROE on reinvested S&P EPS	9.00%	+ Long-term inflation forecast	2.50%
		Normal share repurchase payout ratio	24%	Economic margin (EM) or ROE-CoE	1.00%	= S&P 500 nominal cost of equity	8.00%
Normal 2024E S&P 500 EPS fair to capitalize	\$228	Total payout of S&P 500 EPS	\$131.00	Sources of long-term earnings growth:		* S&P 500 ERP history 300-400bps, w/ real CoE @ 5% -	6.5%
Key principle: steady-state value = normal EPS / real CoE		Total payout ratio of normal and quality adj. EPS	57%	+ Long-term inflation forecast	2.50%		
				+ Fair return on true reinvestment	2.34%	Fair S&P 500 Market Value and Book Value Multiple	
S&P 500 EPS Capitalization Valuation		S&P 500 DPS Discount Model		+ Value added return on true reinvestment	0.43%	2023E end S&P 500 book value per share	\$1,100
Normal EPS / (real CoE - (EM/payout) - EM):		Normal DPS / (nominal CoE - DPS growth):		= Long-term earnings growth	5.27%	Fair PB = Fair PE * normal aggregate ROE	4.35
S&P 500 intrinsic value at 2024 start	4790	S&P 500 intrinsic value at 2024 start	4790	+ Growth from net share repurchases	1.15%	Fair PE =(inc ROE-g)/(inc real ROE*(real CoE-real g))	19.71
S&P 500 intrinsic value at 2024 end	5098	S&P 500 intrinsic value at 2024 end	5098	= Long-term S&P 500 EPS/DPS growth	6.41%	Implied S&P 500 fair value of book at 2024 start	4790
Implied fair fwd PE in early 2024 on 2024E \$243 EPS	19.7	Implied fair forward yield on 2024E DPS of \$76.0	1.59%	+ Fair normal dividend yield	1.59%	Steady-state PB = normal agg. ROE / real CoE	3.77
Implied fair trailing PE at 2024 end on 2024E \$243 EPS	21.0	Implied fair trailing yield on 2024E DPS of \$76.0	1.49%	= Total long-term return at constant PE	8.00%	Confirmed by fair steady-state PE = 1 / real CoE	18.2

4790

Value added growth premium in fair value est.

Normal EPS / (real CoE-value added EPS growth) S&P 500 EPS discount model 5 steps to value:

- 1) Estimate normalized S&P 500 EPS
- 2) Adjust normalized EPS for pro forma accounting quality
- 3) Estimate a fair long-term real return on S&P 500 ownership (CoE)
- 4) Capitalize normalized and accounting quality adj. EPS at real CoE
- 5) Consider long-term potential for value added growth opportunities

		2024E Nor	mal S&P 500	EPS	
	\$230	\$235	\$243	\$245	\$250
5.00%	5648	5865	6226	6319	6556
5.25%	5132	5311	5605	5680	5871
5.50%	4703	4853	5098	5160	5317
5.75%	4341	4468	4675	4727	4859
6.00%	4031	4141	4318	4363	4475

16%

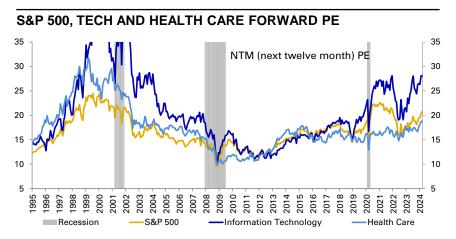
Index	3M relative View	Current Level	Previous Target CIO Day Nov		Chg in Target	Expected Total Return Mar 25	-	— thereof —			Assumptions					
S&P 500		5,153	4,700	5,300	13%	4.3%	USD	8.2%	-5%	1.5%	247	-2.3%	21.5x		31%	2.1x
Stoxx 600		506	465	515	11%	5.0%	EUR	4.7%	-3%	3.3%	37.0	-1.5%	13.9x	-35%	45%	1.1x
EuroStoxx 50		4,993	4,350	5,000	15%	3.3%	EUR	3.5%	-3%	3.2%	370	-1.0%	13.5x	-37%	43%	1.6x
DAX40		17,942	16,600	18,700	13%	4.2%	EUR	4.1%	-3%	3.2%	1458	-1.1%	12.4x	-42%	40%	1.2x
SMI		11,721	10,950	11,450	5%	0.7%	CHF	9.1%	-11%	3.0%	673	-1.2%	17.0x	-21%	52%	0.8x
FTSE 100		7,743	7,400	7,600	3%	2.1%	GBP	-0.6%	-1%	3.9%		-1.4%	11.2x	-48%	45%	0.8x
MSCI EM		1,047	1,010	1,050	4%	3.2%	USD	11.9%	-10%	2.9%	80.7	-6.5%	13.0x	-40%	37%	-0.4x
MSCI AC Asia xJ		661	640	675	5%	4.8%	USD	15.3%	-11%	2.6%	48.3	-5.3%	14.0x	-35%	36%	-0.7x
MSCI Japan		1,643	1,520	1,740	14%	8.2%	YEN	11.2%	-5%	2.3%	109.9	2.5%	15.8x	-27%	34%	0.5x
MSCI Australia		1,547	1,400	1,500	7%	0.9%	AUD	-0.3%	-3%	3.9%	93.0	-0.9%	16.1x	-25%	66%	1.7x

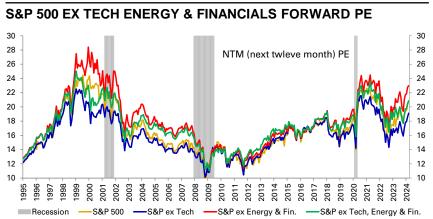
DPS discount model using true DPS (all payout)

Source: DWS Investment Management GmbH. It is not possible to invest directly in an index. No representation or warranty is made by DWS as to the reasonableness or completeness of the forward looking statements or to any other financial information contained herein.

S&P 500 PRICE-TO-EARNINGS (P/E) RATIO



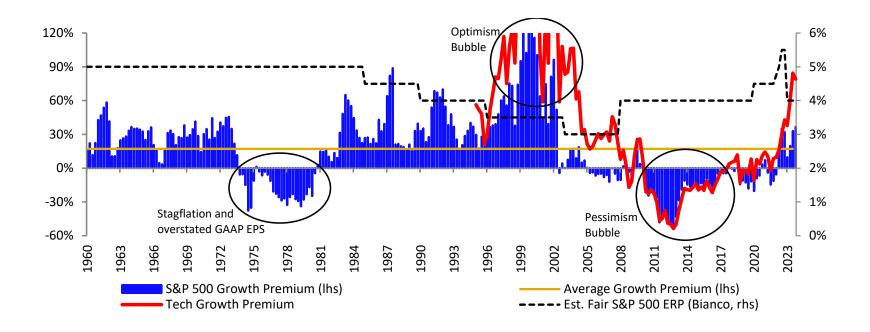




Note: NTM – next twelve month. Forward PE is the price dividend by consensus next twelve month EPS. Source: Factset, DWS Investment GmbH as of 3/31/2024. It is not possible to invest directly in an index.

S&P 500 AND TECH SECTOR GROWTH PREMIUM

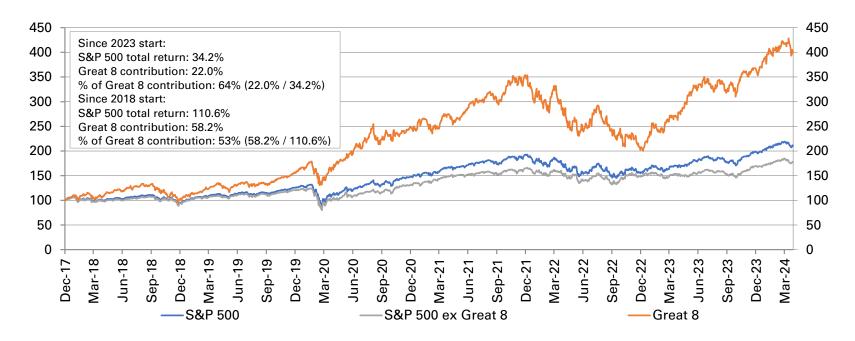




Note: Ihs – left hand side; rhs – right hand side. ERP – equity risk premium. Source: IBES, Haver, DWS Investment GmbH as of 4Q2023. It is not possible to invest directly in an index.

S&P 500 AND THE GREAT 8 TOTAL RETURN





The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: IBES, Factset, DWS Investment GmbH as of 4/25/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 AND THE GREAT 8 P/E RATIO





The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: IBES, Factset, DWS Investment GmbH as of 4/25/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

GLOSSARY



Amortization is an accounting term which refers to the periodical reduction of the book value of intangible assets (such as patents) or bank loans.

Bottom-up is an approach which focuses on approaching a problem through the smallest elements (e.g. individual corporate results).

Capital expenditure (Capex) are funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment.

Cyclical is something that moves with the cycle.

Depreciation refers to an accounting method used to allocate the cost of a tangible or physical asset over its useful life. Depreciation represents how much of an asset's value has been used. It allows companies to earn revenue from the assets they own by paying for them over a certain period of time.

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding.

Earnings per share (EPS) is calculated as a company's net income minus dividends of preferred stock, all divided by the total number of shares outstanding.

EBITDA (earnings, before interest expenses, taxes, depreciation and amortization) is an accounting measure calculated using a company's net earnings, before interest expenses, taxes, depreciation and amortization are subtracted.

Generally accepted accounting principles, or GAAP, are a set of rules that encompass the details, complexities, and legalities of business and corporate accounting.

Leverage attempts to boost gains when investing through the use of borrowing to purchase assets.

Mean reversion is a theory that prices and returns eventually move back toward the mean, or average.

Operating Cash Flow is an accounting term that measures the amount of cash generated by a company through its usual business activities.

Price-to-book (P/B) ratio or multiple compares a stock's market value with its book value.

The price-to-earnings (P/E) ratio compares a company's current share price to its earnings per share.

Pro forma financials are not computed using generally accepted accounting principles (GAAP) and usually leave out one-time expenses that are not part of normal company operations, such as restructuring costs following a merger.

Profit Margin, or net margin is an accounting figure which describes profit in relation to revenue in percent.

A recession is, technically, when an economy contracts for two successive quarters but is often used in a looser way to indicate declining output.

The S&P 500 is an index that includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

A share buyback involves a company buying back its own shares.

Stagflation is the combination of the words "stagnation" and "inflation," referring to a period where inflation is high while the economy is stagnating.

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IMPORTANT INFORMATION



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Past performance is not indicative of future returns.

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