

1Q 2024 EARNINGS SEASON OBSERVATIONS



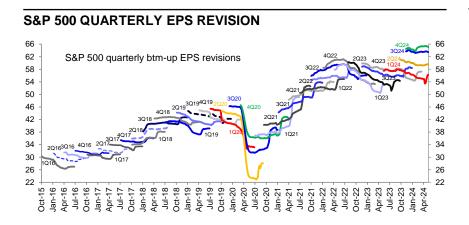
- This data reflects the 431 S&P 500 companies or 88% of index earnings that have reported as of Tuesday May 7th.
- Bottom-up blended 1Q earnings per share (EPS) is \$56.29 (actual results for companies reported and consensus estimates for the rest), +10.0% year-over-year (y/y). This includes a ~\$1.50 acquisition related charge from Bristol Myers Squibb (BMY) that was expected and always within the estimates. Our standing 1Q EPS estimate is \$57. Blended sales growth is +2.8% y/y. Blended pro-forma net margin is 12.9%, vs. 11.6% in 4Q23 and 11.8% a year ago.
- S&P 500 ex the Great 8's (AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA). 2024 consensus EPS have been cut by 9.0% since 2023 start (cut by 2.5% ytd). The Great 8's 2024 consensus EPS have been raised by 23.5% since 2023 start (raised by 8.4% 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.
- 73% of reporting companies beat on earnings per share (EPS) and 22% missed (the rest in-line), with an aggregate surprise of +7.0%, +7.0% ex Financials. Historic average EPS beat is +3.3% (2011-2019 average). 44% beat on sales and 30% missed, with an aggregate surprise of +0.5%, -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 \$245.58. 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 (+44% y/y), Utilities (29%), Consumer Discretionary (25%), Tech (24%) and Financials (12%). EPS y/y growth is weakest at Energy (-24% y/y), Materials (-21%) and Health Care (-5.9% y/y, ex. acquisition charge from BMY).
- 1Q blended sales y/y growth is strongest at Tech (+7.7% y/y), Communication Services (6.6%), Real Estate (6.3%), Health Care (5.9%) and Consumer discretionary (4.1%). Sales y/y growth is weakest at Utilities (-6.2% y/y), Materials (-5.1%), Energy (-1.5%), and Industrials (0.1%).
- Valuations at the S&P are reasonable if excluding the Great 8.
- S&P 500 excluding the Great 8 price-to-earnings (P/E) on 2024 consensus EPS is 18.8x, PE of the Great 8 is 30.7x. Overall S&P PE is 21.3x.
- 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.

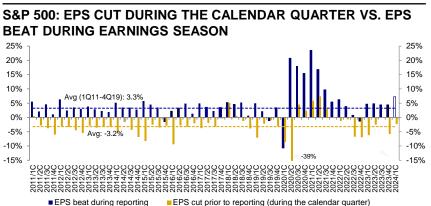
Source: DWS Investment GmbH as of 5/7/2024. For illustrative purposes only. Past performance is not a guarantee of future results. It is not possible to invest directly in an index. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. This information should not be construed as a recommendation of any specific security.

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S&P 500 QUARTERLY EPS REVISION



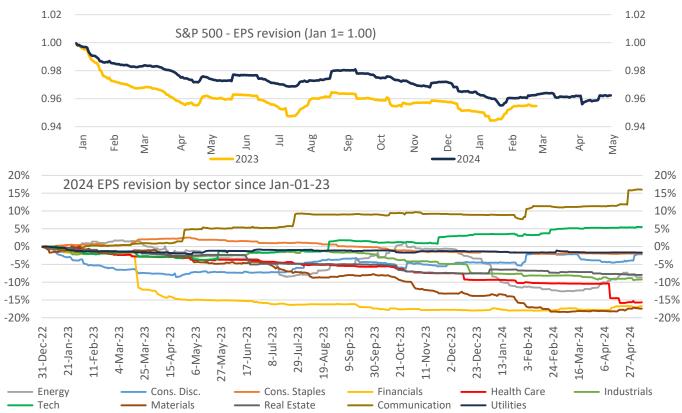




Source: Factset, DWS Investment GmbH as of 5/7/2024. For illustrative purposes only. Past performance is not a guarantee of future results. It is not possible to invest directly in an index.

S&P 500 ANNUAL EPS REVISION

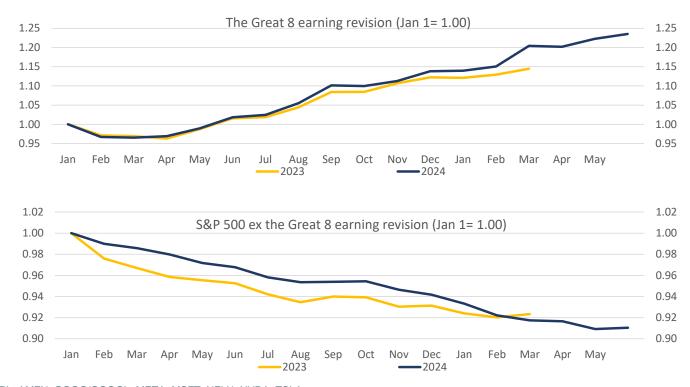




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S&P 500 AND THE GREAT 8 EPS REVISIONS





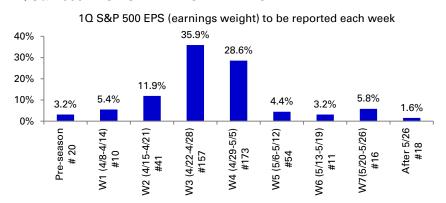
The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA.

Source: IBES, Factset, DWS Investment GmbH as of 5/7/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index. This information should not be construed as a recommendation of any specific security.

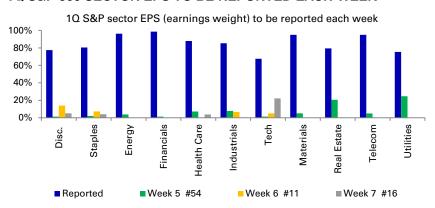
1Q 2024 S&P 500 EARNINGS SEASON SCHEDULE



1Q S&P 500 EPS TO BE REPORTED EACH WEEK



1Q S&P 500 SECTOR EPS TO BE REPORTED EACH WEEK



Source: Factset, DWS Investment GmbH as of 5/7/2024. For illustrative purposes only. Past performance is not a guarantee of future results. It is not possible to invest directly in an index. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

1Q 2024 EARNINGS SEASON SUMMARY STATISTICS



			1Q24	Summar	y (Based on r	eported o	companie	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	88.4%	431	73%	22%	7.0%	8.5%	44%	30%	0.5%	2.6%
S&P 500 ex. Financials & Real Est	85.5%	333	77%	20%	7.0%	7.7%	44%	33%	-0.2%	2.9%
S&P 500 ex. Energy	87.7%	408	74%	22%	7.3%	12.1%	42%	31%	0.4%	3.1%
S&P ex. Tech	93.7%	384	72%	23%	7.5%	7.4%	44%	31%	0.5%	2.5%
S&P ex. Energy, Financials & Real Est	84.2%	310	77%	19%	7.5%	12.6%	42%	33%	-0.4%	3.5%
Communication Services	100.2%	16	81%	19%	14.1%	42.0%	31%	44%	0.3%	7.5%
Consumer Discretionary	78.1%	40	70%	28%	10.5%	37.7%	45%	30%	-0.3%	6.3%
Consumer Staples	82.7%	29	86%	7%	8.0%	6.4%	55%	24%	0.0%	1.3%
Energy	100.0%	23	65%	26%	3.2%	-23.8%	65%	26%	2.0%	-1.5%
Financials	99.4%	68	65%	31%	7.5%	12.1%	47%	25%	4.8%	0.8%
Health Care	94.0%	54	85%	11%	5.9%	-5.9%	56%	26%	0.3%	6.1%
Industrials	89.3%	71	80%	15%	4.5%	8.0%	37%	30%	-2.4%	0.6%
Information Technology	68.3%	47	85%	15%	4.9%	14.8%	43%	26%	0.6%	3.5%
Materials	98.2%	27	67%	30%	3.0%	-21.0%	41%	52%	-0.4%	-5.0%
Real Estate	94.0%	30	57%	27%	3.3%	3.4%	33%	17%	0.4%	6.2%
Utilities	91.4%	26	50%	46%	7.5%	27.5%	19%	62%	-6.7%	-7.9%
Great 8 *	86.6%	8	88%	13%	9.4%	35.7%	75%	13%	0.2%	9.5%
S&P ex Great 8	88.9%	424	73%	22%	6.5%	3.3%	43%	31%	0.6%	1.8%

^{* #} 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

		20					202					202					202					202				2024
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%	10.0%
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%	9.7%
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%	13.4%
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%	6.9%
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%	14.1%
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%	19.9%
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%	43.6%
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%	25.0%
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%	38.5%
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%	5.5%
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%	13.7%
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%	4.5%
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%	-23.8%
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%	12.2%
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%	-5.9%
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%	7.8%
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%	4.7%
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%	10.2%
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%	6.9%
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%	23.5%
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%	-20.7%
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%	3.2%
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%	29.1%

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

S&P 500 SALES GROWTH BY SECTOR



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

					-										-											
			2019					2020					2021				202		i			202		i		
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%	2.8%
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%	3.0%
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%	3.2%
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%	2.2%
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%	3.5%
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%	2.7%
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%	4.1%
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%	5.4%
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%	1.9%
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%	1.6%
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%	-1.5%
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%	0.8%
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%	5.9%
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%	0.1%
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%	0.4%
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%	-0.1%
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%	0.2%
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%	7.7%
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%	-5.1%
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%	6.3%
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%	-6.2%

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

S&P 500 NET MARGINS BY SECTOR



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

	1		2019					2020		i			2021				20			1)23			
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%	12.9%
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%	11.6%
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%	13.2%
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%	11.4%
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%	11.9%
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%	13.1%
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%	8.3%
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%	8.9%
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%	8.6%
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%	6.8%
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%	9.7%
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%	19.2%
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%	8.3%
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%	9.8%
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%	10.5%
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%	11.7%
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%	14.0%
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%	25.7%
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%	9.5%
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%	36.0%
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%	14.3%

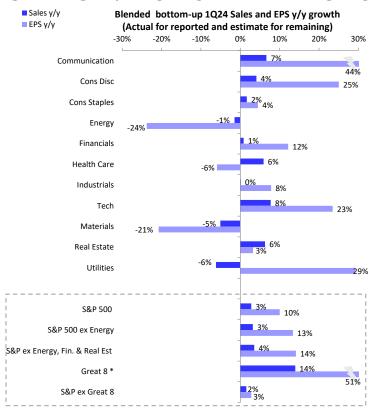
S&P net margins surged to record high of 13.8% in 2021, led by digital firms, and consumer goods producers/retailers. We see some cyclical set-backs in net margins. S&P 500 net margins are cyclical, but not mean reverting, they have been rising since mid-1990s for structural reasons.

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. Source: Factset, DWS Investment GmbH as of 5/7/2024. For illustrative purposes only. It is not possible to invest directly in an index. Past performance is not a guarantee of future results.

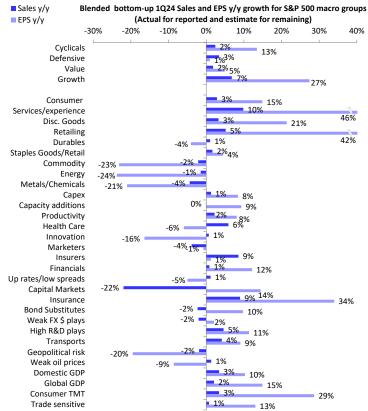
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S&P 500 EPS AND SALES Y/Y GROWTH BY SECTOR



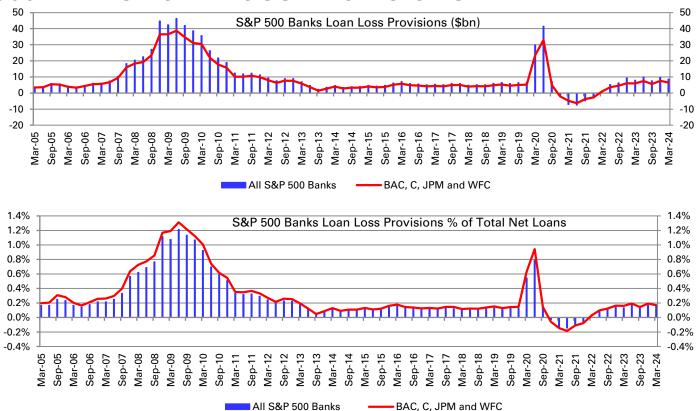


S&P 500 EPS AND SALES Y/Y GROWTH FOR MACRO GROUPS DWS



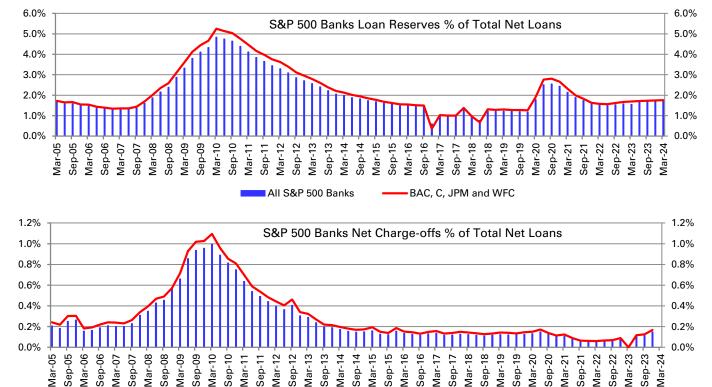
S&P 500 BANKS LOAN LOSS PROVISIONS





S&P 500 BANKS LOAN RESERVES AND CHARGE-OFFS





Source: Factset, DWS Investment GmbH as of 5/7/2024 5/7/2024. For illustrative purposes only. It is not possible to invest directly in an index. Past performance is not a guarantee of future results.

All S&P 500 Banks

BAC, C, JPM and WFC

S&P 500 EPS MODEL



												Bottor	n-up Cons	ensus (IBE	S)		DWS	√iew		Normalize	d 2024
	2014A			2017A				2021A		2023A	y/y	2024E	у/у	2025E	у/у	2024E	у/у	2025E	y/y	(\$)	% c 202
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%	\$246	10.5%	\$279	13.6%	\$243	9.3%	\$260	7.0%	\$243	1009
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%	212.1	22.5%	238.0	12.2%	213.0	23.0%	226.4	6.3%	211.4	999
Consumer Discretionary	57.7	67.6	75.3	79.6	94.8	93.1	62.3	121.6	110.5	156.8	41.9%	177.8	13.4%	203.8	14.6%	168.9	7.7%	179.4	6.2%	172.7	1029
Consumer Staples	84.0	82.8	85.5	89.8	96.9	98.0	105.3	118.0	111.9	124.5	11.3%	128.3	3.0%	138.2	7.8%	121.5	-2.4%	126.4	4.0%	119.2	989
Energy	94.2	39.5	10.4	36.9	69.5	49.1	-6.6	78.7	200.4	141.5	-29.4%	136.6	-3.4%	148.5	8.7%	140.0	-1.0%	142.2	1.6%	141.0	1019
Financials	184.3	200.0	203.8	213.3	262.6	276.6	225.6	363.2	308.5	333.7	8.2%	364.0	9.1%	401.6	10.3%	356.0	6.7%	381.2	7.1%	345.6	979
Health Care	137.9	152.9	157.8	172.2	189.0	207.0	227.0	293.1	308.5	244.0	-20.9%	264.2	8.2%	313.4	18.6%	285.0	16.8%	308.5	8.2%	281.7	999
Industrials	100.6	104.1	98.1	107.1	130.8	113.9	61.2	112.2	135.9	161.5	18.8%	173.1	7.2%	197.9	14.3%	172.0	6.5%	181.3	5.4%	173.6	1019
Information Technology	162.2	168.2	176.4	206.4	237.4	231.9	264.1	345.5	355.2	375.1	5.6%	443.6	18.2%	522.7	17.8%	445.0	18.6%	500.2	12.4%	459.0	1039
Materials	24.6	23.4	22.5	28.7	36.2	34.1	32.5	61.5	63.9	48.4	-24.3%	47.7	-1.3%	55.0	15.3%	48.0	-0.7%	49.7	3.5%	46.7	979
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	1.4%	58.2	6.2%	52.5	-2.8%	53.4	1.7%	50.8	979
Utilities	32.9	33.1	35.7	37.1	40.9	45.0	46.9	49.6	50.9	52.6	3.3%	58.8	11.9%	63.8	8.4%	58.3	10.9%	61.3	5.1%	60.3	1039
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%	2060.9	10.5%	2341.1	13.6%	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%	1924.3	11.6%	2192.5	13.9%	1920.2	11.4%	2067.8	7.7%	1920.9	1009
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%	1617.3	8.5%	1818.4	12.4%	1615.2	8.4%	1709.8	5.9%	1602.9	999
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%	i										

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
2023A	223	53	54.25	58.5	57.25
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 5/7/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. 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



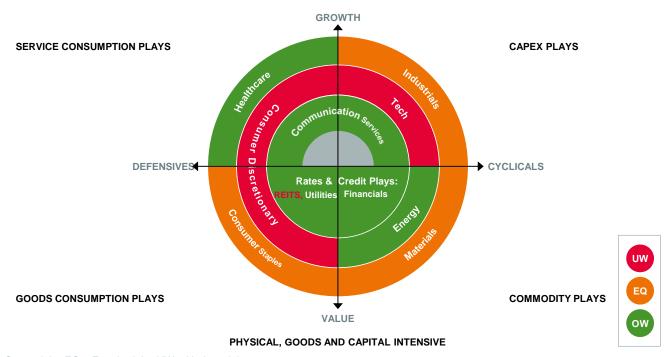
	Market	Allocated	Sector	2022	2023	2024	Overweight	2022	2023	202	4 Equal weight	2022	2023	2024	Underweight	2022	2022	2024	Sector OW	8.89%
0			,	17.3					10.2	17.	·	16.8	15.6		Life Sciences Tools & Services	2022		-		-8.89%
Over-	12.2%	16.0%	Health Care	17.3	21.6	18.7	Biotechnology Health Care Equipment & Supplies	13.3 26.5	26.7	24.	1 Health Care Providers & Services	16.8	15.6	14.8	Life Sciences Tools & Services	24.8	29.0	28.3	Industry OW	
weight							Pharmaceuticals	14.9	25.1	17.	۵							ł		18.05%
	13.3%	1/1 09/	Financials	18.9	17.1	16.4	Banks	13.0	11.2	12.					Capital Markets	20.3	21.1	19.1	Industry UW	-18.05%
	13.570	14.5/0	I IIIaiiciais	10.0			Insurance	20.5	16.9	14.					Consumer Finance	12.5	14.3	13.9	si .	
															Financial Services	28.9	25.2	23.5	Macro tilts:	
	9.0%	10.1%	Communication	29.1	22.9	19.7	Diversified Telecommunication Servi	7.1	7.7	8.3	3 Wireless Telecommunication Service	78.7	23.2	18.4	Media	10.7	10.4	10.1		-4.57%
			Services				Entertainment	84.1	33.7	24.								l	Defensive	4.57%
							Interactive Media & Services	42.2	30.0	24.									Value (Financial+Energy)	2.59%
	2.3%	3.4%	Utilities	20.0	18.8	17.4	Electric Utilities	21.1	19.1	17.	5 Gas Utilities	21.0	18.9	17.9				Į.	Growth	-0.32%
											Independent Power & Renewable E Multi-Utilities	11.3 17.7	10.8 18.4	10.0 17.3					Growth ex Health Care	-4.15%
											Water Utilities	29.8	26.6	25.2					Consumer	-3.45%
	4.2%	5 2%	Energy	9.0	12.1	12.0	Energy Equipment & Services	22.5	15.2	13	3 Oil Gas & Consumable Fuels	8.6	11.9	12.8		-			Services/experience	0.02%
			٠,																Disc. Goods	-3.53%
Equal-	8.9%	8.9%	Industrials	28.0	23.9	22.2	Aerospace & Defense	41.4	37.0	30.	4 Construction & Engineering	42.1	38.5	32.1	Air Freight & Logistics	12.5	17.3	16.6	Retailing	-2.27%
weight							Electrical Equipment	30.7	30.7	27.	0 Machinery	23.0	18.1	18.2	Building Products	22.4	28.1	26.3	Durables	-1.26%
							Industrial Conglomerates	16.1	13.0	11.	1				Commercial Services & Supplies	42.2	43.6	40.2	Staples Goods/Retail	0.06%
							Passenger Airlines	19.6	7.3	7.:	3				Ground Transportation	60.5	29.7	28.2	Commodity	1.13%
							r dooonger / illinioo	10.0	7.0		Ĭ				· '	l			Energy	1.02%
															Professional Services	30.0	28.2	25.7	Metals/Chemicals	0.11%
															Trading Companies & Distributors	27.2	22.6	21.4	Capex	6.71%
	6.2%	6.2%	Consumer Staples	22.3	21.2	20.6	Beverages	25.7	23.1	22.	1 Consumer Staples Distribution & Re	26.5	25.4	24.4	Tobacco	12.8	12.6	12.4	Capacity additions	3.58%
							Household Products	29.2	26.9	25.	7 Food Products	14.9	15.6	15.6	5				Productivity	3.13%
							Personal Care Products	51.7	23.1	23.	1								Health Care	3.83%
																			Innovation	3,45%
	2.4%	2 4%	Materials	16.3	21.0	21.7	,				Chemicals	17.5	22.0	22.1	Construction Materials	51.0	34.8	30.4	Marketers	1.86%
											Metals & Mining	10.8	16.7	20.3	Containers & Packaging	15.4	18.4	18.	Insurers	-0.10%
Under-	2.2%	1 00/.	Real Estate	17.4	17.4	17 1	Specialized REITs	17.6	17.6	16	8 Hotel & Resort REITs	10.5	9.9		Health Care REITs	19.8	20.4	18.9		1.57%
weight	2.2/0	1.070	INEAI LSIAIE				opeoiding of the tree				Tiotor a reconstriction	10.0	0.0	0.0	Industrial REITs	20.9	19.5	20.5		0.66%
weigni											Office REITs	11.4	11.6	12.1	Residential REITs	18.4	17.2	16.9		-0.53%
											Retail REITs	13.1	13.5		Real Estate Mamt. & Development	27.9	37.8	37.8		1.44%
	10.2%	6.7%	Consumer	41.0	28.7	26.8	Automobile Components	16	14.0	11	4 Distributors	16.4	17.0	16.4	1 Automobiles	21.0	21.7	23.8		0.73%
	.0.270	0.7	Discretionary								Hotels Restaurants & Leisure	65	24.2	22.6	Household Durables	11.9	12.0	12.9	Weak FX \$ plays	0.75%
			Disorctionary								Leisure Products	13.7	21.2	19.9	Broadline Retail	-2204	59.7	46.0	High R&D plays	1.80%
			Automobiles	21.0	21.7	23.8	3								Multiline Retail			i	_ , ,	
			Broadline Retail	-2204	59.7	46.0									Specialty Retail	21.4	22.4	21.4	Transports	-0.78%
			CD ex Auto &	27.0	21.9	20.9	9								Textiles Apparel & Luxury Goods	25.2	32.8	29.9	Geopolitical risk	1.89%
	29.1%	24.4%	Information	36.6	34.3	29.2	Communications Equipment	18.2	16.5	15.	9 Software	43.2	37.2	32.6	Electronic Equipment	22.5	26.4	24.9	Weak oil prices	-0.12%
			Technology				IT Services	22.7	20.6		7 Technology Hardware Storage & Pe	28.5	29.0		Semiconductors	46.0	43.3	31.7	Inflation shock	-0.04%
Aggregate	PE: DWS	View					Overweight	20.9	20.3	18.	Equalweight Equalweight	22.2	22.5		Underweight	30.3	28.3	25.2		4.08%
	S&P 500							5188			2022, 2023& 2024 EPS	217.33	223.00		2022, 2023 & 2024 PE	23.9	23.3	21.3		-3.04%
				lder		L	ļ	\sqcup			Bottom-up Consensus EPS	217.33	223.42	245.58	Bottom-up Cons. PE	23.9	23.2	21.		-5.74%
								l							2022, 2023 & 2024 Ex Energy PE	24.2 25.7	24.2	21.9	Consumer TMT	-0.28%
L													\Box		Btm-up Cons. Ex Energy PE	25.7	24.2	21.9	Trade sensitive	-2.38%

Source: Factset, DWS Investment GmbH as of 5/7/2024. 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 May 2024. It is not possible to invest directly in an index. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. 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 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	4,189	19.7	213.0	99%	211.4	-7%	196.6	11%	0.83	5.50%	3,574	20%	4,288	0.9%	4,594	21.7	10%	13%
Consumer Discretionary	4,533	26.8	168.9	102%	172.7	-6%	162.3	10%	0.74	5.50%	2,951	31%	3,875	1.0%	4,146	24.0	-9%	-5%
Automobiles	595	23.8	25.0	95%	23.8	-8%	21.9	30%	0.99	6.50%	336	40%	471	0.5%	511	21.5	-14%	-11%
Broadline (Internet) Retail	1,702	46.0	37.0	120%	44.4	-5%	42.2	0%	0.18	5.25%	803	75%	1,406	0.0%	1,515	34.1	-11%	-8%
ex. Auto & Broadline (Internet) Retail	2,235	20.9	106.9	98%	104.5	-6%	98.3	13%	0.75	5.43%	1,812	10%	1,998	1.5%	2,127	20.3	-5%	-2%
Consumer Staples	2,499	20.6	121.5	98%	119.2	-6%	112.1	14%	0.84	5.25%	2,135	5%	2,242	2.7%	2,354	19.7	-6%	-3%
Energy	1,800	12.9	140.0	101%	141.0	-10%	126.9	13%	0.91	6.25%	2,030	-18%	1,665	2.2%	1,774	12.6	-1%	2%
Financials	5,836	16.4	356.0	97%	345.6	-7%	319.8		1.10	6.25%	5,117	-3%	4,963	1.8%	5,310	15.4	-9%	-6%
Banks	1,501	12.0	125.0	95%	118.8	-7%	110.4		1.11	7.50%	1,473	-10%	1,325	2.7%	1,422	12.0	-5%	-2%
Health Care	5,337	18.7	285.0	99%	281.7	-8%	259.2	10%	1.14	5.40%	4,800	15%	5,520	1.4%	5,879	20.9	10%	13%
Industrials	3,810	22.2	172.0	101%	173.6	-7%	161.4	15%	0.88	5.50%	2,935	10%	3,228	1.6%	3,436	19.8	-10%	-7%
Information Technology	12,983	29.2	445.0	103%	459.0	-3%	445.2	2%	0.95	5.25%	8,481	35%	11,449	0.8%	12,242	26.7	-6%	-2%
Materials	1,043	21.7	48.0	97%	46.7	-8%	42.9	15%	0.89	6.00%	716	5%	751	1.4%	805	17.2	-23%	-20%
Real Estate	896	17.1	52.5	97%	50.8	-3%	49.2	34%	1.80	5.75%	856	5%	899	3.7%	940	18.5	5%	8%
Utilities	1,016	17.4	58.3	103%	60.3	-7%	56.0	80%	-0.64	5.75%	975	0%	975	3.4%	1,022	17.0	1%	4%
S&P 500 (\$ bn)	43,942	21.3	2060.2	100%	2061.9	-6.3%	1931.7			5.55%	34,569	15.3%	39855	1.4%	42,502	20.6	-3%	0%
S&P 500 Index (\$/sh)	5188	21.3	243.0	100%	243.0	-6.2%	228.0	10%	0.93	5.50%	4145	15.6%	4790	1.4%	5098	21.0	-2%	0%



Source: IBES, DWS Investment GmbH as of 5/7/2024. 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. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

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

Value added growth premium in fair value est.

S&P 500 EPS discount model 5 steps to value:

Normal EPS / (real CoE-value added EPS growth)

- 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 Norr	nal 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%

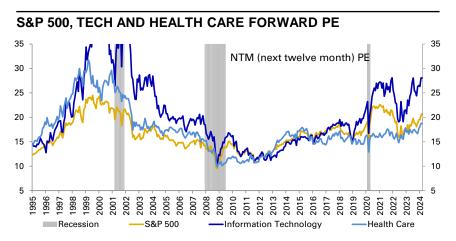
														0.0070		
Index	3M relative View	Current Level	Previous Target CIO Day Nov	Target Mar 25	Chg in Target	Expected Total Return Mar 25		— thereof —			Assumptions					
S&P 500		5,153	4,700	5,300	13%	4.3%	USD	8.2%	-5%	1.5%	247	-2.3%	21.5x		31%	2.1x
Stoxx 600		506	465	515	11%	5.0%	EUR	4.7%	-3%	3.3%	37.0	-1.5%	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
MSCIEM		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

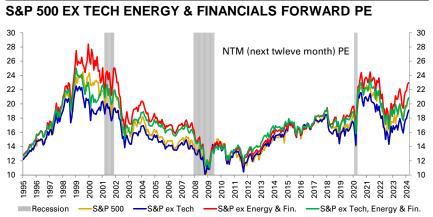
DPS discount model using true DPS (all payout)

Source: DWS Investment Management GmbH. It is not possible to invest directly in an index. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. 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



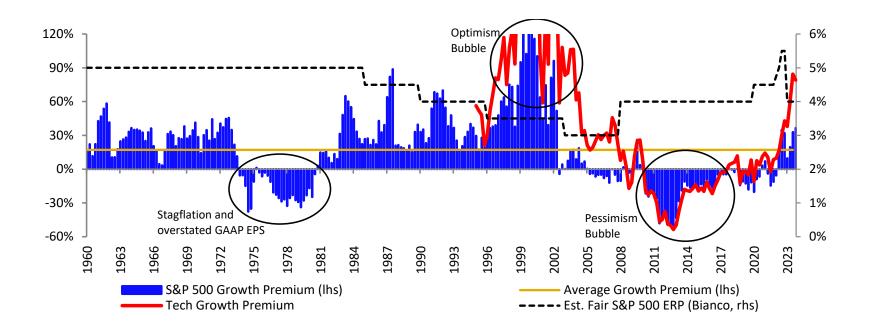




Note: NTM – next twelve month. Forward PE is the price dividend by consensus next twelve month EPS. Source: Factset, DWS Investment GmbH as of 4/30/2024. It is not possible to invest directly in an index. Past performance is not a guarantee of future results.

S&P 500 AND TECH SECTOR GROWTH PREMIUM



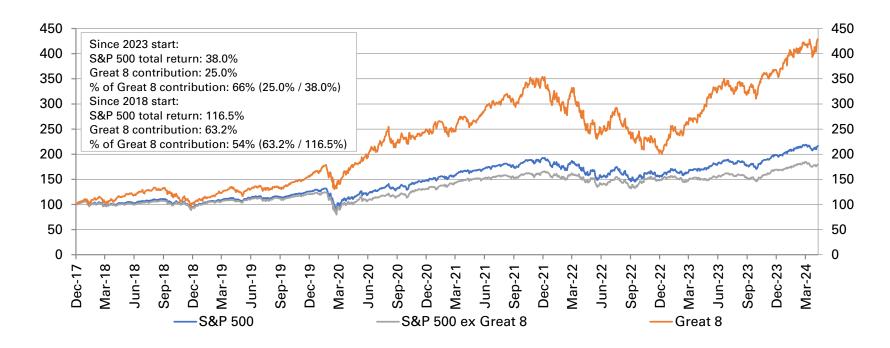


Note: Ihs – left hand side; rhs – right hand side. ERP – equity risk premium.

Source: IBES, Haver, DWS Investment GmbH as of 4Q2023. It is not possible to invest directly in an index. Past performance is not a guarantee of future results.

S&P 500 AND THE GREAT 8 TOTAL RETURN

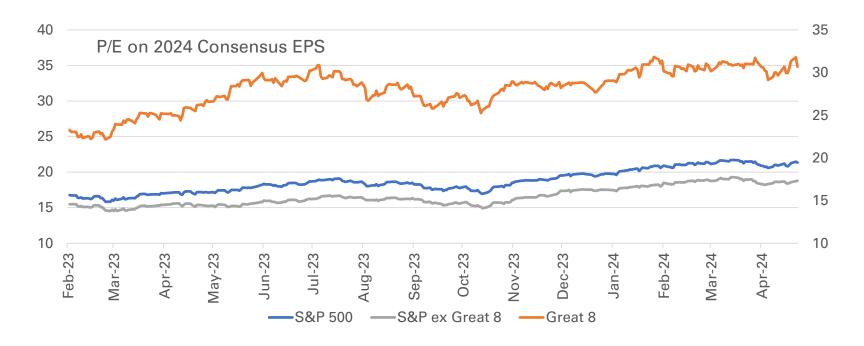




The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: IBES, Factset, DWS Investment GmbH as of 5/7/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

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 5/7/2024. 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 risk premium is the expected return on an investment minus the return that would be earned on a risk-free investment.

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.

Index returns do not reflect fees or expenses, and it is not possible to invest directly in an index.

Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

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