

Different leagues: Great Eight vs. great expectations, S&P 492 vs. bonds



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The Great Eight of the S&P 500 are in a totally different league from the rest

How can investors compare the Great Eight of the S&P 500 to the other mere mortal firms? Microsoft, Apple, Amazon, Alphabet, Nvidia, Meta, Tesla and Netflix have risen as titans in their heavenly realm. A digital realm that most other companies can hardly enter let alone effectively compete with such godly giants. Comparing these eight to the rest of the S&P 500 or S&P 100 or the largest S&P firms from past decades is extremely difficult. Moreover, comparing such titans to small caps or most foreign stocks or other asset classes like bonds, real estate or commodities has become farcical if not comical. One should find more earthly comparisons before concluding that other stocks or asset classes are "cheap." We present such earthly comparisons for the S&P 492 and argue the Great Eight should be evaluated on a stand-alone basis using intrinsic valuation models or constructs.

EPS yields vs. real interest rates can measure mortals, but gods require DCFs

Despite a 10% correction from its 1yr high and finally a resumption of modest y/y EPS growth upon generally good 3Q results so far, especially at Tech & Communications, the S&P trades at about 18.5x current EPS or an earnings yield of nearly 5.5%. Excluding the Great Eight, which trade at about 30x current EPS in aggregate and represent 18% of S&P EPS but 29% of market cap, the S&P 500 or S&P 492 trades at about 16.5x current EPS. Also, excluding Financials & Energy, the S&P 492 trades at about 18x current EPS.

We won't compare the EPS yield of the Great Eight to real interest rates, but the nearly 6% EPS yield of the S&P 492 is only 350bp above the 2.5% real yield on 10yr TIPS. Normally this spread or Equity Risk Premium is closer to 400bp or higher when VIX is well over 15 and investment grade bond spreads over 125bp and high yield over 400bp as all are today. And while EPS yields are higher at Financials and Energy than S&P 492, the credit spreads available from the issuers of these sectors are also higher than average credit spreads. Thus, we generally see corporate bonds or as an asset class more attractive than S&P 492 right now. Otherwise, it would take over 7% EPS growth in 2024 & 2025 from the S&P 492, which we think unlikely and if US slips into a small recession it would likely be flat or down.

It's hard to know what PE multiple the Great Eight will be able to sustain, but over time we think it will very likely decline. If the 10yr TIPS yield stays near 2.5%, we think the aggregate PE at the Great Eight is likely to fall to 25x or less over the next two years. Thus, for investors to earn an annual 10% gain while the PE contracts from roughly 30x to 25x the required annual EPS growth must be 20%. Maybe the gods will deliver, maybe they won't. Building DCF models to explore various growth scenarios and the required capex and other investments needed to support such growth scenarios along with testing the valuation sensitives to cost of capital assumptions are ways to reveal the most credible prophecies.

3Q EPS Tracker: Good, Tech and strong 3Q GDP boosted; cautious outlooks

245 S&P 500 companies comprising 63% of the index earnings have reported. 72% beat on EPS and 25% missed (the rest in-line), with an aggregate surprise of +7.1%, +6.8% ex Financials. Much stronger than the historic average EPS beat of +3.3% (2011-2019 avg). Bottom-up blended 3Q EPS is \$56.74, +3.9% y/y. Blended sales growth is +1.1% y/y. Blended pro-forma net margin is 12.9%, vs. 12.0% in 2Q23 and 12.6% a year ago. Please see our EPS Tracker slide deck as kept up to date on the DWS Americas CIO View website.

Still watching 10yr Treasury & 10yr TIPS yields: Fed is not bond market's friend FOMC decides on Nov 1st, but recent speeches suggest that the Fed is less hawkish. They see hikes so far as probably or nearly enough to sustain the decline in inflation. But a complacent Fed risks a more bearish bond market, especially given the worsening deficit. If 10yr yields exceed 5%, we think the risk of a worse than very "soft recession" will climb.

Next 5%+ S&P price move signal changed from Down to Balanced Risk

We change our signal to Balanced Risk of the next 5%+ S&P price move being up or down. We expect a rangebound S&P between 3900-4300 into yearend and 4000-4600 next year. Our fair intrinsic value targets for the S&P 500 are 4100 at 2023 end and 4500 2024 end. However, we see downside risk on the assumptions underlying these targets. Reporting season is confirming resilience and growth at the mega cap Tech/Digital firms. Thus, we're now more confident that S&P EPS will be about \$222 in 2023 and between \$230 to \$240 in 2024 amidst slow GDP. We're likely to stick with \$235 S&P EPS in 2024 or 6% growth. This assumes a resilient US job market, benign credit costs at big banks, no further dollar appreciation nor deterioration in global manufacturing output/demand, yet some contraction in consumer goods spending but no plunge. We expect positive yet very low single-digit EPS growth at most S&P sectors and industries next year, but high teens EPS growth from Tech and Communications to spruce the overall S&P EPS growth rate to 6%.

Contributor: Ju Wang, Portfolio Manager Equity

Global Equit	ty Index For	ecasts: 12-m	nonths											
Index	Sep 2024F	NTM EPS Growth	Target PE											
S&P 500	4,500	4.8%	19.4											
EuroStoxx 50	4,350	3.3%	12.0											
Stoxx 600	470	3.3%	12.8											
MSCI Japan	1,500	5.1%	15.3											
MSCI Asia xJ	655	6.1%	14.7											
MSCI EM	1,010	3.3%	13.4											
S&P 500 Outlook at Yearend														
S&P 500 Outlook at Yearend 2022 2023F 2024F														
S&P 500	3840	4100	4500											
Dividend Yield	1.75%	% 1.70%	1.65%											
S&P EPS	\$222	2 \$222	\$235											
Trailing PE	17.3	18.6	19.1											
DPS	\$67	\$70	\$74											
N	lext 5%+ Pri	ce Move												
(Up / 🖪	Balanced	Risk / Down)											
Risk of	near-term 10	0%+ correctio	n											
(Lo	w / Modera	ate / High)												
Tayabla II	C. Investor		tione											

		vestor Asset A	
Asset Class	3	Long-term	Current
Fixed Incon	ne/Cash	30-35%	33.5%
Equities		55-60%	55%
US Equitie	S	40%	36%
S&P 50	0	35%	34.5%
Small C	aps	0-10%	1.5%
Foreign D	Μ	10-15%	11%
Foreign E	Μ	0-10%	8%
Alternative	s	10%	11.5%
	Kev	CIO Views	
Macro signa		Oct 2023	Sep 2024F
U.S. Fed Fun		5.25%- 5.50%	4.75%-5.00%
10yr Treasury	y yield	4.85%	4.20%
US IG Corp S	Spreads	165bp	95bp
US High Yield	d Spreads	465bp	450bp
Crude Oil (W	TI) \$/bbl	85	88
EUR / USD F	X rate	1.06	1.12
	GDF	P Forecasts	
Region	2022	2023F	2024F
US	2.1%	2.0%	0.4%
World	3.4%	2.9%	2.7%
Euro area	3.4%	0.8%	0.9%
China	3.0%	4.8%	4.5%

Japan

* Q4/Q4 GDP growth.

EPS = Earnings Per Share GDP = Gross Domestic Product

1.0%

GDP = Gross Domestic Product FX = Foreign Exchange TIPs – Treasury Inflation Protected Securities Source: DWS Investment Management GmbH. All opinions and claims are based upon data on 10/30/2023 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. All foreign asset exposures are not FX hedged unless otherwise noted. For illustrative purposes only.

2.1%

1.1%



S&P 500 Sector and Industry views

	Market	Allocated	Sector	2022	2023	2024	Overweight	2022	2023	2024	Equal weight	2022	2023	2024	Underweight	2022	2023	2024	Sector OW	9.59%
Over-	13.4%		Health Care	15.0	17.2		Biotechnology	11.7	15.3		Health Care Providers & Services	16.2	15.2		Life Sciences Tools & Services	19.2	21.4	20.4	Sector UW	-9.59%
weight	10.470	11.170					Health Care Equipment & Supplies	21.3	21.4										Industry OW	20.95%
weigin							Pharmaceuticals	12.9	17.0		5						ĺ		Industry UW	-20.95%
	4.7%	6.2%	Energy	8.2	11.5	11.0	Energy Equipment & Services	25.1	17.6										3	·
							Oil Gas & Consumable Fuels	7.7	11.1	10.									Macro tilts:	
	8.6%	10.1%	Communication	21.4	17.6	16.1	Diversified Telecommunication Servi Entertainment	6.1 52.5	6.7 29.1	7. 23.	2 Wireless Telecommunication Serv	ic 68.0	17.3	15.2	Media	11.0	10.9	10.7	Cyclicals	-5.21%
			Services				Interactive Media & Services	52.5 29.0	29.1										Defensive	4.90%
	8.4%	9.5%	Industrials	20.4	17.9	17.0	Aerospace & Defense	31.5	22.7		Construction & Engineering	26.0	23.8	19.8	Air Freight & Logistics	11.4	14.8	13.6	Value (Financial+Energy)	1.33%
	0.470	0.070	industriais				Passenger Airlines	12.3	4.5		Ground Transportation	17.1	18.6		Building Products	19.0	17.0	16.1	Growth	-0.14%
							õ	-			·				0				Growth ex Health Care	-4.72%
							Electrical Equipment	21.9	20.8	18.	Industrial Conglomerates	19.7	21.2	18.4	Commercial Services & Supplies	33.4	30.1	27.8	Consumer	-3.15%
											Machinery	17.7	14.5	15.8	Professional Services	26.2	25.8	23.9	Services/experience	0.25%
															Trading Companies & Distributors	19.8	16.9	16.1	Disc. Goods	-4.10%
	6.7%	7 3%	Consumer Staples	19.6	19.1	18.2	Beverages	23.0	21.2	20.	Consumer Staples Distribution & R	e 21.6	21.1	19.5	Food Products	13.9	14.8	14.5	Retailing	-2.06%
	0.7 /0	1.570	Consumer Staples				Household Products				·								Durables	-2.04%
								25.2	23.2		Tobacco	11.5	11.2	11.0					Staples Goods/Retail	0.70%
							Personal Care Products	48.2	60.3	46.	1								Commodity	0.76%
Equal-	12.8%	12.8%	Financials	14.4	13.5	12.9	Banks	8.8	8.0	8.	2 Financial Services	23.4	20.3	18.9	Capital Markets	15.7	17.4	16.1	Energy	1.02%
weight							Insurance	17.0	14.7	12.	3				Consumer Finance	7.9	9.5	9.2	Metals/Chemicals	-0.26%
	2.5%	2.5%	Utilities	16.9	16.0	15.2	Electric Utilities	17.5	16.1	15.3	3 Gas Utilities	18.6	17.8	16.8	Multi-Utilities	15.7	15.8	15.1	Сарех	6.50%
	2.070	2.070	Ounties								Independent Power & Renewable								Capacity additions	3.44%
											Water Utilities	26.3	22.9	21.7					Productivity	3.06%
	2.4%	O 40/	Real Estate	15.1	15.6	15.3	Retail REITs	10.6	11.2	11	Hotel & Resort REITs	8.4	8.3		Health Care REITs	17.4	17.4	16.5	Health Care	4.58%
	2.4%	2.4%	Real Estate	10.1	10.0	10.0	Specialized REITs	16.1	17.3		Industrial REITs	18.9			Residential REITs	15.1	14.2	14.0	Innovation	3.27%
							Specialized REITS	10.1	17.5	10.3	Office REITs								Marketers	2.41%
												9.1	9.2		Real Estate Mgmt. & Development	21.1	27.5	24.8	Insurers	-0.19%
Under-	2.4%	2.1%	Materials	13.4	17.1	16.3	Metals & Mining	8.3	12.1	14.) Chemicals	15.0	18.6	16.8	Construction Materials	35.4 11.5	25.3	24.1 14.3	Financials	0.31%
weight	40.00/	0.50/	0	32.5	24.7	22.4	Automobile Components	16	15.0	10	7 Distributors	14.2	15.1	14.1	Containers & Packaging Automobiles	22.0	15.4 23.8	25.5	Up rates/low spreads	1.55%
	10.3%	6.5%	Consumer	32.5	24.7	23.4	Automobile Components	10	15.0	12.	Hotels Restaurants & Leisure	53	23.3		Household Durables	7.6	23.0 8.8	25.5 9.5	Capital Markets	-2.74%
			Discretionary								Leisure Products	10.3			Broadline Retail	-1456	53.0	9.3 43.2	Insurance	1.50%
			Automobiles	22.0	23.8	25.5						10.0	12.0	10.0	Multiline Retail	1400	00.0	-10.2	Bond Substitutes	0.11%
			Broadline Retail	-1456	53.0	43.2									Specialty Retail	17.7	18.1	17.3	Weak FX \$ plays	0.99%
			CD ex Auto &	-1430	55.0	4J.Z									Textiles Apparel & Luxury Goods	22.0	22.7	20.7	High R&D plays	2.55%
			Broadline Retail	21.9	18.6	17.7									Textiles Apparel & Eukury Coous	22.0	22.1	20.7	Transports	0.11%
															_				Geopolitical risk	1.82%
	27.8%	23.0%	Information	27.6	27.6	24.5	Communications Equipment	16.9	15.3		1 Software	35.1	31.7	28.9	Electronic Equipment	17.8	19.3	17.7	Weak oil prices	0.34%
			Technology				IT Services	19.8	19.2	17.	9				Semiconductors	26.1	29.8	23.7	Inflation shock	0.28%
															Technology Hardware Storage & Per	26.0	26.2	24.3	Stagflation Protection	4.31%
Aggregate	PE: DWS	View					Overweight	14.6	15.2	14.:	2 Equalweight 2022, 2023& 2024 EPS	23.7	21.4		Underweight 2022, 2023 & 2024 PE	22.0 18.8	22.6 18.7	20.7	Domestic GDP	-2.22%
<u> </u>	S&P							4117			2022, 2023& 2024 EPS Bottom-up Consensus EPS	219.13 219.13	220.00		2022, 2023 & 2024 PE Bottom-up Cons. PE	18.8	18.7 18.5	17.5 16.6	Global GDP	-4.28%
<u> </u>	<u> </u>		ļ			<u> </u>	<u> </u>			I	Dottom up Consensus Er's	213.13	222.22	240.33	2022, 2023 & 2024 Ex Energy PE	19.5	19.5	18.1	Consumer TMT	0.22%
												<u> </u>			Btm-up Cons. Ex Energy PE	20.1	19.2	17.1	Trade sensitive	-1.31%

More details on sector earnings forecast and sector intrinsic valuation can be found towards the back of this note. Price as of 10/27/2023

Source: DWS Investment Management GmbH

	Market Value (\$bn)	Current 2023 PE	2023E Earnings (\$bn)	Normal Ratio	Normal 2023E Earnings	Accounting Quality Adjustment	Fully Adjusted Earnings	Net Debt / Market Cap	FCF / EPS	Real CoE	Steady State Value	Growth Premium	2023 Start Fair Value (\$bn)	2023E Dividend Yield	2023 End Fair Value (\$bn)	PE on Normal 2023E EPS	2023 End Upside %	2023 End Upside vs S&P 500
Communication Services	3,138	17.6	178.5	97%	173.7	-8%	159.8	14%	0.83	5.60%	2,854	10%	3,139	1.1%	3,376	19.4	8%	10%
Consumer Discretionary	3,625	24.7	146.5	101%	148.1	-8%	136.3	12%	0.74	5.50%	2,478	19%	2,957	1.2%	3,174	21.4	-12%	-10%
Automobiles	649	23.8	27.3	95%	25.9	-10%	23.3	21%	0.99	6.50%	359	40%	503	0.4%	549	21.2	-16%	-13%
Broadline (Internet) Retail	1,166	53.0	22.0	125%	27.5	-7%	25.6	1%	0.18	5.50%	465	50%	698	0.0%	756	27.5	-35%	-32%
ex. Auto & Broadline (Internet) Retail	1,809	18.6	97.2	97%	94.7	-8%	87.3	15%	0.75	5.28%	1,653	6%	1,757	1.7%	1,873	19.8	4%	6%
Consumer Staples	2,303	19.1	120.5	99%	119.4	-7%	111.1	15%	0.84	5.10%	2,178	0%	2,178	3.1%	2,287	19.2	-1%	2%
Energy	1,646	11.5	143.5	86%	124.1	-15%	105.5	13%	0.91	6.00%	1,758	-20%	1,406	2.6%	1,497	12.1	-9%	-6%
Financials	4,449	13.5	328.5	99%	324.0	-9%	294.8		1.10	6.40%	4,607	-8%	4,238	2.2%	4,541	14.0	2%	5%
Banks	1,024	8.0	128.0	95%	121.6	-10%	109.4		1.11	7.50%	1,459	-15%	1,240	4.0%	1,321	10.9	29%	32%
Health Care	4,623	17.2	268.5	103%	276.6	-8%	254.4	10%	1.14	5.40%	4,712	3%	4,853	1.6%	5,181	18.7	12%	15%
ndustrials	2,871	17.9	160.0	100%	159.5	-8%	146.7	17%	0.88	5.60%	2,620	3%	2,698	2.1%	2,875	18.0	0%	3%
nformation Technology	9,795	27.6	355.0	105%	371.6	-5%	353.0	2%	0.95	5.40%	6,537	20%	7,844	1.0%	8,426	22.7	-14%	-11%
Vaterials	856	17.1	50.0	97%	48.3	-10%	43.5	18%	0.89	5.80%	750	0%	750	1.8%	802	16.6	-6%	-3%
Real Estate	780	15.6	50.0	95%	47.6	-8%	43.8	37%	1.80	5.50%	795	0%	795	4.1%	830	17.5	6%	9%
Utilities	856	16.0	53.5	103%	55.2	-8%	50.8	92%	-0.64	5.50%	924	0%	924	3.9%	966	17.5	13%	16%
S&P 500 (\$ bn)	34,943	18.8	1854.5	100%	1848.0	-8.0%	1699.6			5.60%	30,211	5.2%	31783	1.7%	33,957	18.4	-3%	0%
S&P 500 Index (\$/sh)	4117	18.7	220.0	100%	220.0	-8.2%	202.0	11%	0.93	5.60%	3607	4.9%	3784	1.7%	4039	18.4	-2%	0%

DWS Investment GmbH View: S&P 500 fair value by sector: Assuming a ~5.60% real cost of equity (CoE) for overall S&P 500

>5%	Bigger upside vs. S&P 500
between -5% and 5%	Same upside as S&P 500
<-5%	Smaller upside vs. S&P 500

Source: IBES, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.

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 9/30/2023.

The estimated 2023 year end upside is on absolute valuation basis of each sector, not on relative sector valuation basis.

S&P 500 Intrinsic Valuation Model

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 2023E S&P 500 EPS	\$220.00	DWS 2023E S&P 500 DPS	\$70.00	DWS 2023E S&P 500 aggregate ROE	21.8%	Fair long-term nominal return on S&P 500 index	8.60%
		2023E dividend payout ratio	32%	2022E end S&P 500 book value per share	\$1,007	Components of estimated fair S&P 500 return:	
DWS "normal 2023E" S&P 500 EPS	\$220.00	DWS "normal 2023E" S&P 500 DPS	\$70.00	DWS "normal 2023E" S&P 500 aggregate ROE	20.1%	+ Long-term real risk free interest rate	1.60%
"Normal 2023E" EPS / 2023E EPS	100%	Normal dividend payout ratio	35%			+ Long-term fair S&P 500 equity risk premium*	4.00%
				S&P EPS retained for true reinvestment	47%	= Long-term real S&P 500 cost of equity	5.60%
Accounting quality adjustment to pro forma EPS	-\$18.00	EPS directed to net share repurchases	\$38.00	Estimated ROE on reinvested S&P EPS	8.90%	+ Long-term inflation forecast	3.00%
		Normal share repurchase payout ratio	19%	Economic margin (EM) or ROE-CoE	0.30%	= S&P 500 nominal cost of equity	8.60%
Normal 2023E S&P 500 EPS fair to capitalize	\$202	Total payout of S&P 500 EPS	\$108.00	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	53%	+ Long-term inflation forecast	3.00%		
				+ Fair return on true reinvestment	2.61%	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	0.14%	2022E end S&P 500 book value per share	\$1,007
Normal EPS / (real CoE - (EM/payout) - EM):		Normal DPS / (nominal CoE - DPS growth):		= Long-term earnings growth	5.75%	Fair PB = Fair PE * normal aggregate ROE	3.95
S&P 500 intrinsic value at 2023 start	3784	S&P 500 intrinsic value at 2023 start	3784	+ Growth from net share repurchases	1.00%	Fair PE =(inc ROE-g)/(inc real ROE*(real CoE-real g))	19.7
S&P 500 intrinsic value at 2023 end	4039	S&P 500 intrinsic value at 2023 end	4039	= Long-term S&P 500 EPS/DPS growth	6.75%	Implied S&P 500 fair value of book at 2023 start	3979
Implied fair fwd PE in early 2023 on 2023E \$220 EPS	17.2	Implied fair forward yield on 2023E DPS of \$70.0	1.85%	+ Fair normal dividend yield	1.85%	Steady-state PB = normal agg. ROE / real CoE	3.58
Implied fair trailing PE at 2023 end on 2023E \$220 EPS	18.4	Implied fair trailing yield on 2023E DPS of \$70.0	1.73%	= Total long-term return at constant PE	8.60%	Confirmed by fair steady-state PE = 1 / real CoE	17.9
Normal EPS / (real CoE-value added EPS growth)	3699	DPS discount model using true DPS (all payout)	3784	Value added growth premium in fair value est.	5%	Normal 2023E economic profit per share	\$145.61

S&P 500 EPS discount model 5 steps to value:			Nor	mal 2023E S&	P 500 EPS		
1) Estimate normalized S&P 500 EPS			\$210	\$215	\$220	\$225	\$230
2) Adjust normalized EPS for pro forma accounting quality		5.10%	4565	4726	4889	5054	5223
 Estimate a fair long-term real return on S&P 500 ownership (CoE) 	Real	5.35%	4156	4289	4423	4558	4695
4) Capitalize normalized and accounting quality adj. EPS at real CoE	cost of	5.60%	3815	3927	4039	4152	4265
5) Consider long-term potential for value added growth opportunities	equity	5.85%	3526	3622	3717	3812	3907
		6.10%	3279	3361	3443	3524	3606

Source: DWS Investment Management GmbH

Optimistic 2023 end 10yr yield outlook: 2.5% inflation expectation + 1% overnight real rate + 0.75% inflation risk premium - 0.5% risk asset hedge = 3.75% Pessimistic 2023 end 10yr yield outlook: 2.5% inflation expectation + 1% overnight real rate + 1.5% inflation risk premium - 0% risk asset hedge = 5.00%

DWS September 2024 equity index targets

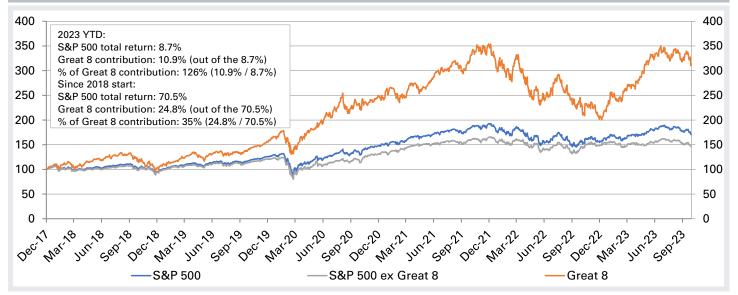
Index	Current Level	Previous Target CIO Day May	Target Sep 24	Chg in Target	Expected Total Return Sep 24					Assumptions		
	08/09/2023									EPSNTM* (e)	DW S vs. Cons.	Target LTM P/E in Sep 24
S&P 500	4,451	4,200	4,500	7%	2.7%	USD	4.8%	-4%	1.6%	231	-4.5%	19.4x
Stoxx 600	451	480	470	-2%	7.9%	EUR	3.3%	0%	3.7%	36.6	-3.4%	12.8x
Euro Stox x 50	4,184	4,450	4,350	-2%	7.8%	EUR	3.3%	0%	3.8%	363	-3.6%	12.0x
DAX40	15,595	17,000	16,700	-2%	7.1%	EUR	3.7%	0%	3.7%	1446	-3.1%	11.2x
SMI	10,916	11,500	11,300	-2%	6.8%	CHF	9.3%	-5%	3.3%	695	-2.4%	16.2x
FTSE 100	7,419	7,700	7,400	-4%	4.1%	GBP	1.4%	-2%	4.4%		-2.3%	10.4x
MSCIEM	974	1,040	1,010	-3%	6.5%	USD	3.3%	0%	2.8%	75.3	-7.8%	13.4x
MSCIAC Asia xJ	620	680	655	-4%	8.2%	USD	6.1%	0%	2.5%	44.7	-8.6%	14.7x
MSCI Japan	1,441	1,400	1,500	7%	6.4%	YEN	5.1%	-2%	2.3%	96.5	-2.1%	15.3x
MSCI Australia	1,425	1,450	1,350	-7%	-1.0%	AUD	-2.5%	-4%	4.3%	92.0	-1.8%	14.5x

DWS Investment G	mbH S&P 50	00 Annu	al EPS	Outlook	K																
												Bottor	n-up Cons	ensus (IBE	S)		DWS \	/iew		Normalize	d 2023
		2014A	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	y/y	2023E	y/y	2024E	y/y	2023E	y/y	2024E	у/у	(\$)	% of 2023
S&P 500 EPS (historica	I index)	\$118.82	\$117.46	\$118.10	\$132.00	\$161.93	\$162.93	\$139.72	\$208.12	\$218.09	4.8%										
S&P 500 EPS (current c	constituents)	\$116.70	\$117.17	\$117.41	\$129.32	\$155.41	\$161.17	\$143.29	\$208.02	\$219.13	4.3%	\$222	1.4%	\$248	11.8%	\$220	0.4%	\$235	6.8%	\$220	100%
Sector (\$ bn)																					
Communication Services	6	67.4	77.8	90.6	98.8	123.4	129.8	135.0	187.4	146.9	-21.6%	180.1	22.6%	209.7	16.5%	178.5	21.5%	195.0	9.2%	173.7	97%
Consumer Discretionary		58.4	68.7	76.6	80.6	95.6	93.6	64.6	124.2	111.5	-10.2%	150.4	35.0%	170.3	13.2%	146.5	31.4%	155.0	5.8%	148.1	101%
Consumer Staples		83.9	82.7	85.4	89.7	96.8	97.9	105.2	117.8	117.2	-0.5%	122.6	4.6%	130.8	6.6%	120.5	2.8%	126.5	5.0%	119.4	99%
Energy		94.3	39.4	10.5	37.1	69.8	49.4	-6.1	79.2	200.5	153.3%	151.3	-24.6%	155.9	3.1%	143.5	-28.4%	150.0	4.5%	124.1	86%
Financials		184.1	199.6	203.7	213.2	262.7	276.6	225.5	363.2	308.5	-15.1%	342.0	10.9%	364.9	6.7%	328.5	6.5%	345.0	5.0%	324.0	99%
Health Care		136.7	151.7	156.5	170.8	187.5	205.5	225.7	293.4	307.9	5.0%	252.4	-18.0%	296.3	17.4%	268.5	-12.8%	293.0	9.1%	276.6	103%
Industrials		100.5	103.9	98.3	107.2	130.5	125.1	66.9	112.0	141.1	26.0%	158.2	12.2%	178.7	12.9%	160.0	13.4%	168.5	5.3%	159.5	100%
Information Technology		162.6	168.2	176.5	208.0	239.7	233.4	264.7	345.8	354.8	2.6%	368.6	3.9%	430.7	16.8%	355.0	0.1%	400.0	12.7%	371.6	105%
Materials		24.8	23.8	22.9	28.9	36.4	34.3	32.5	61.4	64.0	4.2%	50.3	-21.5%	52.9	5.3%	50.0	-21.9%	52.5	5.0%	48.3	97%
Real Estate		22.6	25.8	28.5	32.1	35.8	37.3	37.3	44.5	51.8	16.4%	51.4	-0.6%	53.9	4.7%	50.0	-3.4%	51.0	2.0%	47.6	95%
Utilities		32.9	33.0	35.6	37.0	40.8	44.8	46.8	49.3	50.8	2.9%	53.6	5.6%	58.2	8.6%	53.5	5.4%	56.5	5.6%	55.2	103%
S&P 500		968.3	974.8	985.0	1103.4	1319.0	1327.8	1198.1	1778.1	1854.9	4.3%	1881.1	1.4%	2102.2	11.8%	1854.5	0.0%	1992.9	7.5%	1848.0	100%
S&P ex. Energy (\$bn)		874.0	935.4	974.6	1066.3	1249.2	1278.4	1204.2	1698.9	1654.4	-2.6%	1729.8	4.6%	1946.3	12.5%	1711.0	3.4%	1842.9	7.7%	1723.9	101%
S&P ex. Tech (\$bn)		805.7	806.6	808.5	895.4	1079.4	1094.4	933.4	1432.3	1500.2	4.7%	1512.4	0.8%	1671.5	10.5%	1499.5	0.0%	1592.9	6.2%	1476.5	98%
S&P 500 Sales/Share (hi	istorical index)	\$1,163	\$1,127	\$1,151	\$1,232	\$1,339	\$1,415	\$1,362	\$1,567	\$1,753	11.9%										
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%											
S&P 500 EPS	Ye	ear		1Q		2Q		3Q		4Q											
2019A	1	.63		39		41		41		42											
2020A	1	.40		33		28		38		42											
2021A	2	10		49		53		54		54											
2022A	2	22		55		58		56		53											
2023E	2	20		53		55		55		57											

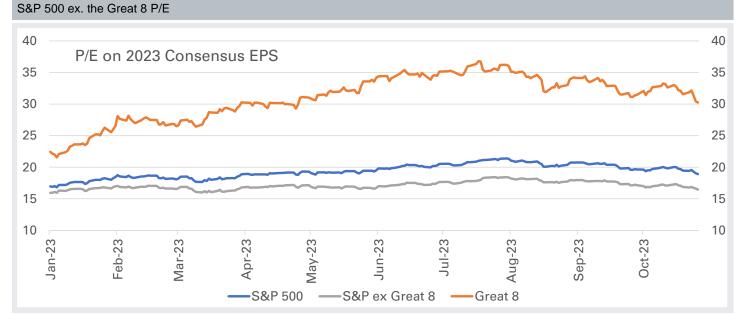
S&P 500 EPS historical constituents represents the earnings per share (EPS) of S&P 500 index constituents at the time, while S&P 500 EPS current constituents represents the earnings per share of index constituents as of the date the data was compiled 9/30/2023. Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



S&P 500 ex. the Great 8 total return



Note: The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



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

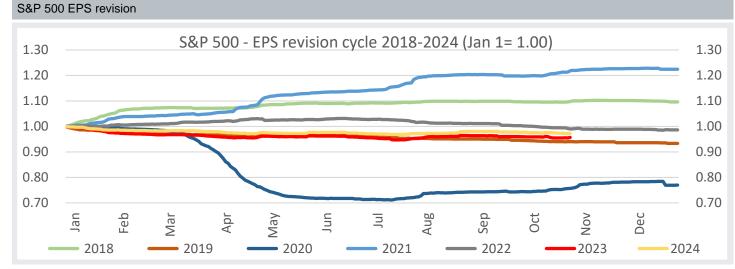
Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



The Great 8 EPS revision

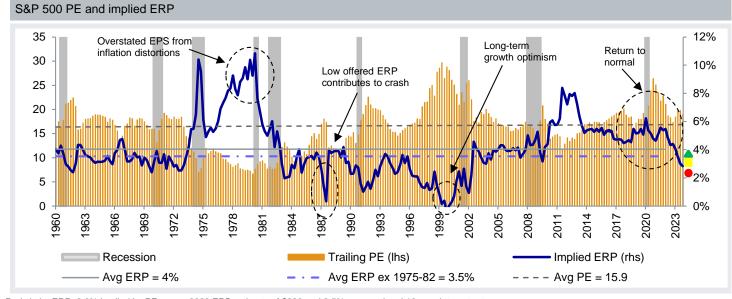


Note: The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



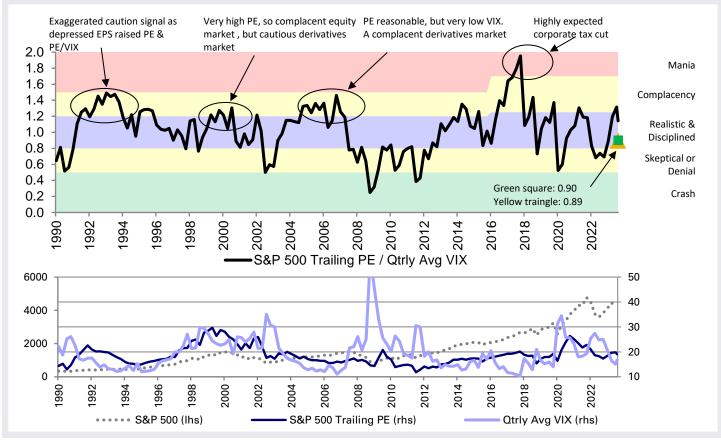
Note: The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.





Red circle: ERP=2.6% implied by PE on our 2023 EPS estimate of \$220 and 2.5% assumed real 10 year interest rate Yellow square: ERP=3.1% implied by PE on our 2023 EPS estimate of \$220 and 2.0% assumed real 10 year interest rate Green triangle: ERP=3.6% implied by PE on our 2023 EPS estimate of \$220 and 1.5% assumed real 10 year interest rate Source: Haver, S&P, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.

S&P 500 PE / VIX

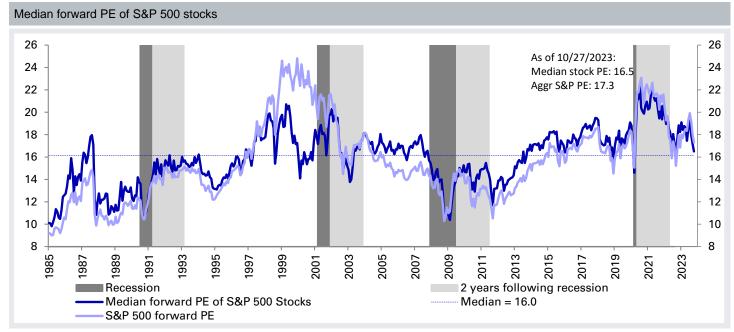


Green square: PE on our 2023E normalized EPS divided by VIX on Oct 27 2023. Yellow triangle: Trailing PE as of Oct 20 2023 divided by VIX on Oct 27 2023.

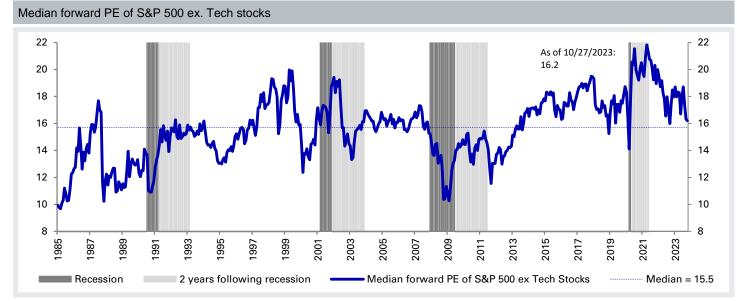
Source: Haver, S&P, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.

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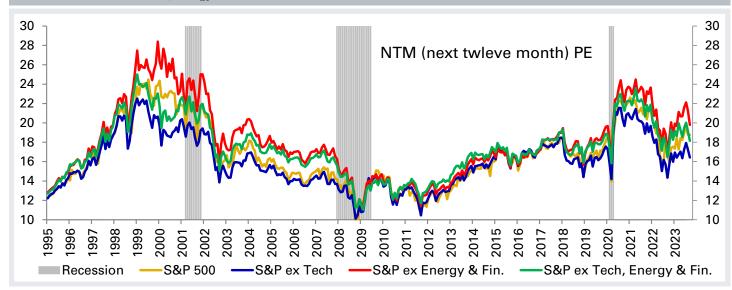
Source: Clarifi, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



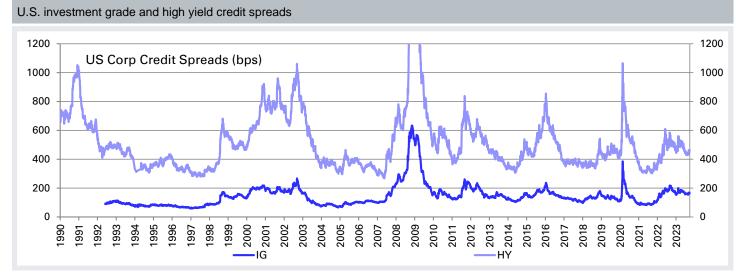
Source: Clarifi, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



Forward PE of S&P ex. Tech, Energy & Financials



Source: Clarifi, DWS Investment GmbH as of 9/30/2023. Past performance may not be indicative of future results.



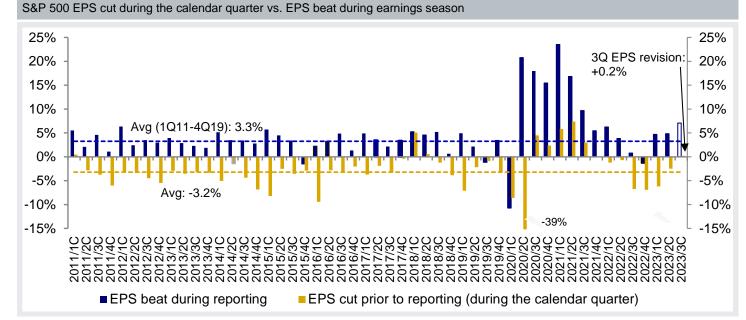
Source: Haver, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.

// DWS

S&P 500 3Q earnings season summary statistics

r				_			-			
			3Q23	8 Summar	y (Based on ı	eported of	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	63.4%	245	72%	25%	7.1%	7.9%	42%	33%	1.3%	1.7%
S&P 500 ex. Financials & Real Est	60.3%	175	75%	23%	6.8%	6.0%	45%	36%	1.4%	1.3%
S&P 500 ex. Energy	63.5%	235	72%	25%	7.6%	14.8%	41%	33%	0.5%	3.9%
S&P ex. Tech	69.1%	224	70%	26%	6.4%	8.6%	42%	33%	1.3%	1.8%
S&P ex. Energy, Financials & Real Est	60.1%	165	76%	22%	7.5%	15.0%	43%	36%	0.5%	3.8%
Communication Services	93.5%	11	82%	18%	9.2%	38.2%	45%	36%	0.5%	5.8%
Consumer Discretionary	54.9%	25	72%	24%	18.4%	46.3%	52%	36%	0.3%	7.9%
Consumer Staples	75.6%	19	74%	26%	4.5%	13.3%	47%	37%	-0.7%	4.4%
Energy	61.8%	10	60%	30%	0.8%	-38%	70%	30%	8.3%	-12.4%
Financials	77.7%	53	70%	26%	8.8%	16.8%	42%	30%	0.7%	4.5%
Health Care	65.2%	23	83%	13%	6.0%	3.4%	61%	26%	1.7%	5.2%
Industrials	66.7%	46	72%	26%	-2.0%	8.5%	30%	39%	0.4%	1.5%
Information Technology	39.3%	21	95%	10%	12.3%	3.1%	38%	29%	1.9%	1.5%
Materials	66.5%	14	64%	29%	3.5%	-8.2%	43%	43%	0.5%	-10.7%
Real Estate	57.6%	17	47%	41%	1.3%	-4.7%	18%	12%	1.1%	4.2%
Utilities	23.4%	6	50%	50%	-4.0%	5.7%	33%	67%	-4.5%	0.6%

Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.

// DWS

S&P 500 EPS growth, sales growth and net margin (3Q23 is blended with actual for reported and consensus for the rest)

		20	19			r	20	20			1	20	21				20)22			1	2023	
EPS growth (y/y)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2020	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2022	3Q22	4Q22	2022	1Q23	2Q23	3Q23
S&P 500	2.6%	1.5%	1.2%	3.6%	2.2%	-12.3%	-31.8%	-7.3%	3.1%	-9.4%	48.1%	91.5%	41.1%	32.2%	48.3%	10.6%	9.1%	4.6%	-2.8%	6.5%	-0.2%	-3.3%	3.9%
S&P 500 ex. Financials & Real Est	1.2%	-0.9%	0.4%	2.1%	0.3%	-6.0%	-27.5%	-8.4%	-0.5%	-7.4%	36.0%	80.4%	43.7%	38.8%	46.1%	17.9%	15.9%	8.4%	-1.6%	11.3%	-1.7%	-5.9%	1.0%
S&P 500 ex. Energy	3.8%	2.2%	3.6%	6.5%	4.0%	-11.9%	-25.8%	-3.5%	6.6%	-5.4%	49.3%	77.8%	33.7%	24.5%	41.4%	4.9%	-1.4%	-3.1%	-7.1%	-0.5%	-2.0%	3.4%	9.3%
S&P 500 ex. Tech	4.9%	3.2%	2.4%	1.7%	2.2%	-16.9%	-38.4%	-9.8%	-0.4%	-14.8%	49.9%	103.8%	41.3%	34.5%	52.9%	9.9%	11.3%	6.2%	-0.7%	7.1%	1.9%	-5.0%	2.5%
S&P ex. Energy, Fin & Real Est	2.8%	-0.1%	3.4%	5.6%	2.5%	-5.2%	-19.4%	-3.4%	3.8%	-2.0%	37.0%	64.1%	34.0%	28.5%	37.2%	10.4%	2.3%	-1.3%	-7.1%	2.4%	-4.3%	2.1%	7.4%
S&P ex. Energy, Fin, Real Est, Healthcare	1.0%	-3.0%	2.1%	4.5%	0.7%	-8.0%	-25.8%	-6.4%	3.0%	-4.7%	39.8%	79.4%	35.8%	28.9%	40.0%	8.5%	0.6%	-1.6%	-7.9%	1.3%	-0.7%	11.0%	15.0%
Communication Services	8.9%	6.8%	0.8%	8.8%	2.5%	-8.5%	-16.4%	0.0%	9.6%	4.5%	53.9%	66.6%	40.9%	17.4%	39.0%	-4.6%	-14.1%	-21.7%	-25.8%	-17.2%	-10.1%	15.5%	45.3%
Consumer Discretionary	11.8%	4.7%	2.4%	1.6%	1.1%	-48.0%	-70.7%	-0.5%	-15.2%	-28.4%	169.7%	358.1%	18.4%	85.3%	94.0%	-25.7%	-8.3%	14.9%	-14.9%	-6.5%	52.7%	51.9%	31.1%
Cons. Disc. ex. Auto	15.0%	6.9%	3.4%	14.4%	4.7%	-37.8%	-57.2%	-13.2%	-31.3%	-29.4%	107.5%	215.3%	35.8%	102.7%	92.8%	-36.1%	-18.8%	7.7%	-27.6%	-14.6%	78.1%	58.9%	42.1%
Cons. Disc. ex. Broadline Retail	3.2%	4.3%	5.1%	0.7%	-0.8%	-53.1%	-91.6%	-15.7%	-34.7%	-43.8%	168.8%	1594.8%	38.4%	83.0%	115.5%	14.2%		21.3%	31.4%	26.5%	20.7%	24.4%	11.8%
Cons. Disc. ex. Auto & Broadline Retail	4.5%	6.7%	6.8%	15.8%	3.0%	-41.6%	-79.7%	-32.7%	-54.5%	-47.6%	84.1%	505.9%	74.7%	113.7%	119.5%	17.3%	15.6%	14.4%	22.9%	25.4%	26.6%	23.4%	18.1%
Consumer Staples	-0.2%	0.0%	3.2%	3.7%	1.7%	4.4%	1.8%	9.5%	9.3%	7.9%	19.6%	16.4%	6.7%	7.1%	12.6%	4.3%	-3.7%	-0.9%	-2.5%	0.9%	2.6%	10.4%	5.8%
Energy	-24.3%	-12.9%	-37.2%	-42.5%	-30.2%	-22.2%	-168.6%		-101.2%	-112.2%	9.9%	249.3%	2084%	23957%	-1313%	251.9%	300.0%	143.4%	61%	156%	23%	-48%	-34.7%
Financials	7.4%	10.6%	4.3%	11.3%	9.6%	-35.6%	-49.8%	-3.3%	18.2%	-17.5%	118.0%	164.0%	34.4%	12.3%	62.9%	-13.6%	-15.8%	-12.0%	-9.3%	-12.6%	7.0%	9.5%	19.9%
Health Care	10.1%	12.1%	8.7%	10.2%	9.9%	4.6%	3.1%	8.1%	7.2%	8.0%	28.4%	26.4%	28.1%	26.9%	28.4%	16.9%	8.3%	-0.1%	-3.9%	6.3%	-14.9%	-26.3%	-17.7%
Industrials	8.4%	-8.9%	2.4%	-9.3%	-3.2%	-25.8%	-78.7%	-46.7%	-29.3%	-46.2%	-3.3%	351.2%	75.4%	38.2%	68.0%	35.4%	29.8%	19.2%	39.0%	29.1%	24.4%	14.8%	7.9%
Industrials ex. Aerospace & Defense	6.9%	2.9%	3.8%	-0.3%	4.2%	-25.3%	-83.2%	-50.6%	-32.1%	-47.2%	-7.8%	342.8%	88.1%	50.7%	79.7%	42.1%	42.6%	30.8%	27.3%	34.5%	24.7%	12.8%	3.0%
Industrials ex. Transportation	8.1%	-16.9%	0.7%	-12.0%	-7.0%	-14.2%	-36.0%	-11.7%	5.1%	-21.0%	24.9%	107.6%	23.1%	4.7%	29.2%	12.0%	6.1%	4.7%	37.1%	12.4%	16.9%	17.8%	18.7%
Industrials ex. Aerospace & Defense and Tr	5.6%	0.6%	2.4%	2.3%	2.6%	-7.8%	-37.6%	-3.6%	11.5%	-14.2%	28.4%	72.4%	20.3%	11.3%	30.0%	12.6%	14.7%	16.6%	20.4%	14.9%	15.5%	15.3%	12.7%
Information Technology	-7.1%	-6.1%	-3.8%	11.4%	2.2%	10.8%	2.2%	4.1%	16.0%	16.2%	41.2%	52.6%	40.3%	24.8%	32.0%	13.2%	-0.6%	-2.2%	-10.0%	3.8%	-8.2%	4.9%	10.3%
Materials	-12.6%	-20.1%	68.6%	-13.0%	-10.5%	-7.5%	-34.9%	-13.8%	13.4%	-6.2%	49.7%	139.7%	97.2%	72.5%	90.7%	52.2%	21.9%	-7.6%	-20.5%	8.9%	-22.7%	-26.8%	-19.3%
Real Estate	3.6%	1.5%	3.5%	-0.9%	1.6%	-1.8%	-12.7%	-6.0%	1.9%	-3.8%	8.9%	30.1%	19.1%	10.5%	15.6%	17.0%	10.9%	10.5%	9.1%	11.5%	-2.3%	-0.2%	-2.4%
Utilities	0.0%	1.0%	7.0%	16.2%	5.9%	3.5%	6.2%	-2.4%	-5.2%	-1.4%	-4.5%	8.3%	10.2%	-0.2%	0.1%	24.5%	-3.8%	-7.7%	-3.8%	2.0%	-26.7%	-4.6%	5.4%

			2019					2020					2021				20)22				2023	
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
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%	5.3%	1.1%
S&P 500 ex. Financials & Real Est	3.2%	2.9%	1.9%	6.2%	3.6%	-2.8%	-12.0%	-2.6%	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%	2.5%	1.1%
S&P 500 ex. Energy	3.7%	3.4%	3.5%	7.7%	4.5%	-1.6%	-6.7%	0.2%	4.0%	-1.1%	12.3%	20.6%	13.5%	11.5%	14.2%	10.3%	6.7%	8.7%	7.2%	8.1%	9.1%	8.7%	3.0%
S&P 500 ex. Tech	3.9%	3.4%	2.6%	6.6%	4.2%	-2.9%	-12.3%	-2.7%	0.2%	-5.0%	10.6%	24.9%	15.8%	15.7%	17.0%	13.5%	12.3%	12.5%	9.1%	11.6%	9.2%	4.8%	1.0%
S&P ex. Energy, Fin & Real Est	3.5%	3.4%	3.2%	7.6%	4.4%	-2.0%	-7.4%	0.7%	4.7%	-1.1%	12.6%	22.1%	13.7%	11.7%	15.7%	11.8%	7.4%	8.8%	7.3%	8.1%	8.1%	7.2%	3.3%
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%	13.4%	22.9%	12.9%	10.9%	15.9%	10.6%	6.3%	9.9%	8.3%	7.8%	9.4%	7.9%	2.7%
Communication Services	13.1%	15.7%	11.6%	4.2%	9.7%	4.1%	-7.4%	0.4%	-6.9%	-0.9%	8.6%	22.4%	13.2%	22.2%	19.7%	7.7%	7.2%	5.4%	4.5%	2.4%	5.2%	3.5%	5.6%
Consumer Discretionary	4.4%	5.4%	5.7%	3.0%	4.3%	-3.3%	-15.0%	4.9%	11.2%	6.2%	23.0%	39.0%	12.1%	12.3%	14.1%	10.3%	12.3%	15.2%	10.7%	11.0%	8.7%	9.6%	5.9%
Cons. Disc. ex. Auto	7.0%	6.7%	8.2%	7.9%	7.0%	-1.4%	-4.1%	5.4%	12.2%	11.9%	28.1%	33.3%	18.2%	14.5%	15.7%	10.1%	9.1%	10.8%	7.2%	7.7%	6.4%	6.2%	6.0%
Cons. Disc. ex. Broadline Retail	2.1%	2.8%	2.3%	-1.2%	1.0%	-9.5%	-26.7%	-2.5%	1.9%	-1.3%	17.0%	44.4%	11.1%	13.5%	11.6%	11.6%	14.3%	15.6%	11.6%	11.8%	8.5%	9.2%	3.7%
Cons. Disc. ex. Auto & Broadline Retail	4.3%	3.4%	4.1%	3.5%	3.2%	-9.8%	-17.5%	-4.8%	-0.4%	3.2%	21.5%	37.2%	19.6%	17.5%	12.9%	11.8%	10.2%	9.3%	6.6%	7.1%	5.0%	4.1%	2.8%
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%	10.3%	9.3%	9.2%	6.0%	6.6%	5.0%	2.7%	3.1%
Energy	0.5%	-0.7%	-9.0%	-6.2%	-3.9%	-10.9%	-53.7%	-34.2%	-31.4%	-32.8%	4.3%	109.9%	72.7%	90.1%	66.0%	57.3%	77.1%	48.8%	14.0%	47.3%	-3.9%	-28.8%	-14.6%
Financials	4.9%	3.4%	5.1%	8.2%	5.3%	0.1%	-2.6%	-2.1%	0.0%	-0.6%	11.4%	12.3%	11.9%	9.7%	5.0%	1.1%	1.7%	7.7%	6.3%	7.5%	16.1%	18.4%	0.8%
Health Care	14.6%	14.8%	15.6%	13.2%	15.7%	9.2%	2.7%	9.8%	12.1%	10.3%	10.4%	19.9%	16.1%	14.6%	15.2%	15.4%	10.5%	5.6%	4.4%	9.1%	4.1%	5.4%	5.0%
Industrials	5.1%	-0.2%	0.8%	2.1%	1.9%	-7.1%	-23.3%	-15.7%	-9.5%	-10.7%	-0.7%	28.1%	17.2%	13.8%	14.4%	12.6%	13.2%	13.1%	10.9%	11.4%	7.8%	4.5%	1.4%
Industrials ex. Aerospace & Defense	3.1%	-1.6%	-0.2%	3.9%	0.9%	-8.6%	-25.2%	-16.2%	-10.6%	-13.3%	1.2%	33.2%	21.8%	19.4%	17.7%	17.4%	17.7%	15.5%	10.3%	13.7%	7.2%	2.5%	-0.5%
Industrials ex. Transportation	6.0%	-1.4%	0.6%	2.8%	1.8%	-7.3%	-16.6%	-10.4%	-5.7%	-5.8%	1.7%	19.7%	8.2%	4.9%	9.4%	5.1%	5.4%	9.7%	11.5%	7.6%	8.8%	8.8%	4.8%
Industrials ex. Aerospace & Defense and Tr	3.4%	-4.0%	-1.0%	6.0%	0.3%	-9.6%	-16.2%	-8.5%	-5.5%	-7.7%	5.9%	22.8%	10.6%	8.7%	11.9%	8.7%	8.8%	12.0%	10.8%	9.3%	8.2%	7.4%	3.0%
Information Technology	-0.4%	-0.7%	0.4%	5.4%	-0.2%	3.4%	5.4%	-0.2%	10.4%	10.9%	22.4%	21.3%	24.7%	15.8%	17.6%	13.4%	7.9%	6.5%	-2.6%	7.7%	-2.9%	-0.1%	2.2%
Materials	0.1%	-16.2%		-15.1%	-9.1%	-16.3%	-15.0%	-6.9%	-5.3%	-6.8%	10.7%	36.6%	33.6%	39.2%	32.2%	27.1%	19.2%	7.6%	-3.8%	10.2%	-7.5%	-12.5%	-9.8%
Real Estate	5.4%	5.4%	6.3%	5.1%	5.4%	6.0%	-5.4%	-3.5%	-1.3%	-0.7%	2.1%	18.2%	16.6%	18.4%	12.5%	20.8%	17.2%	14.3%	8.0%	14.7%	6.1%	6.4%	5.1%
Utilities	1.0%	0.7%	0.5%	0.1%	6.9%	-5.7%	-5.2%	-2.4%	-23.6%	-9.8%	9.4%	5.6%	4.9%	51.3%	21.3%	15.7%	27.8%	27.0%	16.2%	10.9%	13.0%	-3.9%	2.3%

			2019					2020					2021				20)22				2023	
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
S&P 500	11.5%	11.7%	12.0%	11.4%	11.3%	10.2%	8.9%	11.3%	11.6%	10.6%	13.6%	13.8%	13.7%	13.1%	13.4%	13.1%	13.2%	12.6%	11.6%	12.6%	11.8%	12.0%	12.9%
S&P 500 ex. Financials & Real Est	10.1%	10.4%	10.9%	10.3%	10.0%	9.7%	8.5%	10.1%	10.1%	9.6%	11.8%	12.2%	12.5%	12.0%	11.9%	11.9%	12.3%	11.8%	10.6%	11.6%	10.7%	11.0%	11.7%
S&P 500 ex. Energy	12.0%	12.3%	12.5%	11.9%	11.8%	10.7%	9.8%	12.0%	12.2%	11.2%	14.3%	14.4%	14.1%	13.5%	13.9%	13.3%	13.0%	12.3%	11.4%	12.5%	11.7%	12.2%	13.1%
S&P 500 ex. Tech	10.5%	10.8%	10.9%	10.0%	10.3%	9.0%	7.6%	10.0%	10.0%	9.2%	12.3%	12.5%	12.3%	11.5%	12.1%	11.7%	12.1%	11.4%	10.2%	11.4%	10.7%	10.8%	11.5%
S&P ex. Energy, Fin & Real Est	10.6%	10.9%	11.4%	10.9%	10.5%	10.2%	9.5%	10.9%	10.8%	10.4%	12.4%	12.8%	12.8%	12.3%	12.3%	12.1%	11.9%	11.4%	10.3%	11.4%	10.5%	11.1%	11.8%
S&P ex. Energy, Fin, Real Est, Healthcare	10.7%	11.0%	11.7%	11.2%	10.7%	10.3%	9.0%	11.0%	11.2%	10.5%	12.7%	13.2%	13.3%	12.8%	12.7%	12.2%	12.2%	11.6%	10.6%	11.6%	10.8%	12.3%	13.0%
Communication Services	16.1%	16.2%	15.5%	16.4%	15.2%	14.1%	14.6%	15.5%	19.2%	16.0%	20.0%	19.9%	19.2%	18.3%	18.5%	17.5%	15.1%	13.3%	12.0%	14.2%	14.2%	16.2%	17.8%
Consumer Discretionary	7.2%	7.8%	8.2%	7.0%	7.3%	3.7%	2.5%	7.5%	5.2%	4.8%	8.1%	8.3%	8.0%	8.3%	8.0%	5.2%	6.5%	7.7%	6.2%	6.5%	7.0%	8.8%	9.5%
Cons. Disc. ex. Auto	8.1%	8.9%	9.2%	8.7%	8.4%	4.9%	3.8%	7.2%	5.2%	5.1%	7.8%	9.0%	8.3%	8.9%	8.1%	4.2%	6.3%	7.7%	5.6%	6.0%	6.7%	9.2%	10.4%
Cons. Disc. ex. Broadline Retail	7.3%	8.4%	9.3%	7.7%	7.9%	3.6%	0.7%	7.6%	4.8%	4.3%	8.0%	8.7%	9.5%	7.3%	8.1%	7.9%	9.0%	9.7%	8.3%	8.9%	8.4%	10.0%	10.4%
Cons. Disc. ex. Auto & Broadline Retail	8.4%	10.1%	11.0%	10.5%	9.7%	5.2%	2.2%	7.2%	4.5%	4.5%	7.6%	9.8%	10.6%	7.8%	8.3%	7.5%	9.7%	10.6%	8.4%	9.2%	8.5%	11.1%	12.1%
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%	6.6%	6.3%	6.6%	6.7%	7.0%	6.8%
Energy	4.8%	5.8%	5.5%	4.7%	5.3%	4.2%	-8.6%	-0.7%	-0.1%	-1.0%	4.6%	6.6%	9.1%	9.6%	7.6%	10.6%	14.7%	14.6%	13.0%	13.1%	13.0%	10.1%	10.9%
Financials	18.9%	18.8%	17.7%	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%	16.6%	18.0%	17.6%	16.6%	19.3%
Health Care	10.3%	10.5%	10.2%	9.6%	9.9%	9.9%	10.7%	10.3%	9.5%	9.8%	11.7%	11.5%	11.5%	10.5%	11.1%	11.8%	11.1%	10.7%	9.5%	10.7%	9.4%	7.7%	8.3%
Industrials	9.4%	9.4%	10.5%	8.9%	9.7%	7.5%	2.6%	6.2%	6.7%	5.8%	7.1%	9.3%	9.5%	8.2%	8.5%	8.4%	10.5%	9.7%	10.0%	9.6%	9.4%	11.3%	10.2%
Industrials ex. Aerospace & Defense	9.5%	11.4%	11.1%	9.9%	10.3%	8.0%	2.8%	6.4%	7.5%	6.0%	7.4%	9.6%	10.1%	9.6%	9.2%	8.8%	11.4%	11.1%	10.8%	10.6%	10.0%	12.4%	11.5%
Industrials ex. Transportation	9.1%	7.7%	9.5%	8.0%	9.7%	8.4%	6.1%	8.8%	8.4%	8.3%	9.7%	10.6%	10.4%	8.6%	10.0%	10.2%	10.6%	9.8%	10.5%	10.2%	10.7%	11.3%	11.0%
Industrials ex. Aerospace & Defense and Tr	9.0%	9.9%	10.0%	9.1%	10.7%	9.6%	8.0%	10.2%	10.6%	9.8%	11.3%	11.6%	11.8%	11.1%	11.7%	11.6%	12.2%	12.0%	12.1%	12.1%	12.2%	13.0%	13.4%
Information Technology	21.0%	21.5%	22.4%	23.7%	21.4%	21.8%	20.2%	23.0%	24.5%	21.9%	24.8%	25.3%	25.6%	25.9%	24.3%	24.6%	23.0%	23.3%	23.6%	23.2%	22.8%	23.9%	25.1%
Materials	7.6%	11.2%	10.4%	9.4%	9.3%	8.9%	8.6%	9.6%	11.2%	9.4%	12.0%	15.0%	14.0%	13.5%	13.5%	13.9%	14.7%	11.4%	10.6%	12.8%	11.3%	11.9%	10.1%
Real Estate	34.5%	34.0%	33.7%	32.5%	33.8%	32.7%	32.8%	34.0%	35.1%	34.0%	36.2%	37.1%	35.8%	33.9%	36.1%	36.6%	36.8%	36.3%	36.0%	36.6%	35.4%	36.1%	34.6%
Utilities	13.2%	12.7%	16.6%	11.0%	12.8%	15.0%	14.4%	17.3%	15.2%	14.9%	14.7%	16.2%	19.0%	10.3%	12.9%	16.0%	12.3%	13.9%	8.7%	12.0%	10.6%	12.3%	14.4%

Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



S&P 500 industry monitor (1 of 2)

Sector	Industry	PE on 2022 EPS	PE on 2023 Consensus EPS		2024 Consensus EPS Growth	3m Revision		2023 End Upside (Intrinsic Valuation)	Combined Signal
Consumer Discretionary		32.3	21.6	31.6%	13.6%	7.4%	-12.4%	-12.4%	1
	Automobile Components	18.4	11.9	25.8%	23.0%	-1.8%	-21.0%	24.0%	-1
	Automobiles	24.9	23.6	4.0%	1.3%	2.7%	-22.8%	-15.5%	0
	Household Durables	7.5	8.2	-11.4%	3.2%	10.4%	-17.2%	32.6%	-1
	Leisure Products	10.5	9.6	-10.6%	23.1%	-12.4%	-25.8%	30.6%	-1
	Textiles Apparel & Luxury Goods	24.6	20.8	4.0%	14.0%	-0.3%	-8.4%	-12.8%	0
	Hotels Restaurants & Leisure	77.3	18.9	248.1%	17.4%	7.3%	-13.4%	-1.9%	1
	Distributors	14.2	13.4	-2.6%	8.2%	-2.1%	-18.8%	12.7%	-1
	Broadline Retail	111.3	37.9	110.6%	39.4%	32.6%	-4.0%	-35.1%	1
	Specialty Retail	18.0	16.6	1.1%	7.3%	1.6%	-12.5%	5.8%	C
Consumer Staples		19.7	17.6	5.1%	6.6%	-0.1%	-11.1%	-0.7%	
	Consumer Staples Distribution & Retail	21.9	20.1	1.4%	7.6%	-2.2%	-7.5%	-0.3%	0
	Food Products	13.7	14.0	-5.2%	3.9%	1.1%	-16.1%	14.5%	(
	Beverages	23.2	19.4	11.7%	7.2%	1.5%	-13.7%	4.4%	(
	Торассо	11.7	10.7	3.8%	5.5%	-1.1%	-11.2%	10.6%	(
	Household Products	25.5	21.5	9.5%	8.3%	0.9%	-6.2%	-8.1%	(
	Personal Care Products	38.8	18.5	94.2%	8.1%	-0.8%	-27.6%	-52.0%	0
Energy		9.1	10.6	-17.5%	3.6%	5.3%	-0.3%	-9.0%	1
	Energy Equipment & Services	29.6	14.5	68.1%	21.2%	-0.2%	-0.3%	6.0%	1
	Oil Gas & Consumable Fuels	8.4	10.3	-20.1%	2.5%	5.7%	-0.3%	-10.4%	1
Financials		14.2	12.2	9.0%	6.6%	2.0%	-10.0%	2.1%	
	Banks	8.5	8.0	13.7%	-6.9%	3.4%	-16.6%	29.0%	1
	Financial Services	23.6	18.1	18.3%	10.2%	4.5%	-7.1%	-3.9%	1
	Consumer Finance	7.6	8.6	-18.8%	8.1%	-0.4%	-15.8%	11.0%	-2
	Capital Markets	15.3	13.9	-5.7%	16.3%	-3.0%	-14.4%	-23.2%	(
	Insurance	17.2	11.9	16.0%	24.5%	1.7%	2.0%	11.0%	1
Health Care		15.0	15.7	-18.3%	17.5%	-5.9%	-8.6%	12.1%	-
	Health Care Providers & Services	16.3	13.9	7.8%	9.3%	0.6%	1.0%	11.2%	(
	Health Care Equipment & Supplies	22.3	20.1	1.9%	8.8%	0.5%	-20.2%	5.6%	(
	Life Sciences Tools & Services	18.9	20.9	-13.4%	4.2%	-7.2%	-21.9%	-7.6%	
	Biotechnology	11.5	14.5	-24.4%	4.9%	0.6%	-2.9%	21.8%	(
	Pharmaceuticals	12.9	14.6	-38.7%	44.4%	-18.0%	-4.7%	18.2%	-1
Industrials		22.0	16.2	20.4%	13.0%	-1.1%	-11.9%	0.1%	(
	Aerospace & Defense	42.1	18.7	68.0%	34.2%	-8.2%	-7.7%	-5.2%	1
	Building Products	19.5	15.2	17.8%	9.0%	2.5%	-18.1%	-8.4%	1
	Trading Companies & Distributors	20.8	15.7	24.4%	6.9%	1.2%	-4.6%	5.6%	î
	Electrical Equipment	22.5	18.5	8.7%	12.0%	4.0%	-9.5%	3.5%	(
	Construction & Engineering	26.5	19.6	14.6%	17.9%	0.8%	-17.7%	-8.1%	(
	Industrial Conglomerates	20.0	16.6	-1.1%	22.4%	6.1%	-10.3%	-3.1%	(

Combined signal rules: Green – at least 2 of the following 3 must be green: EPS growth, EPS revision, price momentum Red – at least 2 of the following 3 must be red: EPS growth, EPS revision, price momentum Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.



S&P 500 industry monitor (2 of 2)

								2023 End	
			PE on 2023	2023	2024	2023 EPS	3m Total	Upside	
Sector	Industry	PE on 2022 EPS	Consensus EPS	Consensus EPS Growth	Consensus EPS Growth	3m Revision	Return Momentum	(Intrinsic Valuation)	Combined
Sector	-	-							Signal
	Machinery Commercial Services & Supplies	<u>18.8</u> 37.2	13.8 26.7	31.7% 25.2%	3.2% 11.1%	5.6% 11.5%	-11.8% -2.3%	8.6% -25.9%	1
					11.1%	0.0%		-25.9%	0
	Professional Services	26.6	21.8	8.8%			-11.3%		
	Air Freight & Logistics	11.1	13.1	-26.2%	14.1%	-8.3%	-22.4%	-6.6%	-1
	Passenger Airlines Ground Transportation	19.8 17.4	5.1 17.2	<u>264.2%</u> -8.4%	5.5% 10.3%	-16.4% -6.7%	-34.3% -14.8%	130.2% 0.2%	<u>-1</u> -1
Information Tasknalogy	Ground Hansportation	27.2	22.8			2.8%	-14.8%	-14.0%	
nformation Technology			-	2.3%	16.9%				
	IT Services	20.5	18.4	5.4%	6.0%	0.7%	-4.4%	-2.7%	0
	Software	36.3	26.9	17.7%	14.6%	1.8%	-4.2%	-13.9%	1
	Communications Equipment	18.0	14.3	19.0%	5.3%	1.3%	0.7%	17.2%	1
	Technology Hardware Storage & Peripherals	25.5	24.1	-3.6%	9.8%	0.2%	-13.8%	-14.6%	0
	Electronic Equipment Instruments & Components	17.9 23.9	17.4 19.9	-6.1% -9.5%	9.7% 32.7%	-4.0% 8.6%	-14.1% -13.9%	-11.8% -16.8%	0 0
	Semiconductors & Semiconductor Equipment								
Materials		12.8	16.2	-24.9%	5.6%	-3.3%	-11.6%	-6.3%	-1
	Chemicals	14.7	16.7	-20.1%	10.5%	-3.5%	-11.3%	-7.9%	-1
	Construction Materials	34.2	21.6	36.5%	16.3%	7.7%	-11.4%	-33.1%	1
	Metals & Mining	7.6	14.0	-39.8%	-10.6%	-5.3%	-13.8%	11.0%	-1
	Containers & Packaging	11.1	14.6	-27.4%	4.5%	-2.2%	-10.2%	-3.7%	-1
Real Estate		25.0	30.2	-18.8%	2.2%	2.5%	-13.9%	6.4%	0
	Industrial REITs	22.4	35.4	-27.3%	-13.0%	13.8%	-20.6%	2.7%	-1
	Hotel & Resort REITs	13.3	15.3	-6.2%	-7.1%	-6.2%	-16.2%	73.9%	-1
	Office REITs	16.2	19.7	-39.0%	35.0%	-2.5%	-24.1%	35.7%	-1
	Health Care REITs	94.6	83.2	0.5%	13.1%	7.1%	-6.6%	4.5%	1
	Residential REITs	24.6	33.9	-16.2%	-13.1%	19.7%	-16.4%	22.0%	-1
	Retail REITs	25.5	24.1	7.5%	-1.7%	-0.2%	-15.8%	26.2%	0
	Specialized REITs	24.5	29.4	-21.9%	7.0%	0.0%	-11.0%	-1.0%	0
	Real Estate Management & Development	20.4	24.4	-29.6%	19.3%	-13.4%	-16.3%	-30.8%	-1
Communication Services		18.7	14.9	6.7%	17.1%	5.7%	-7.5%	7.6%	1
	Diversified Telecommunication Services	5.8	6.6	-13.1%	0.9%	0.7%	2.0%	17.6%	0
	Wireless Telecommunication Services	80.5	14.0	314.4%	38.2%	0.6%	-0.6%	30.8%	1
	Media	11.2	9.8	1.3%	13.0%	2.6%	-10.9%	19.4%	0
	Entertainment	27.5	20.6	-14.2%	55.6%	-6.1%	-9.0%	-14.3%	-1
	Interactive Media & Services	25.4	18.0	19.3%	18.5%	10.8%	-8.1%	9.0%	1
Utilities		16.7	14.7	4.6%	8.6%	-0.4%	-11.6%	12.9%	0
	Multi-Utilities	15.9	15.2	-1.7%	6.3%	-3.5%	-10.9%	5.0%	0
	Water Utilities	27.1	22.6	12.0%	7.0%	0.7%	-20.3%	2.4%	0
	Gas Utilities	18.7	16.1	8.7%	6.9%	0.1%	-12.5%	3.9%	0
	Electric Utilities	17.0	14.5	7.3%	9.5%	1.0%	-11.1%	16.5%	0
	Independent Power and Renewable Electricity Producers	9.0	7.8	2.4%	12.7%	-2.4%	-31.3%	41.9%	-1
S&P 500	S&P 500	19.1	16.9	0.5%	12.0%	1.4%	-9.4%	-1.9%	C

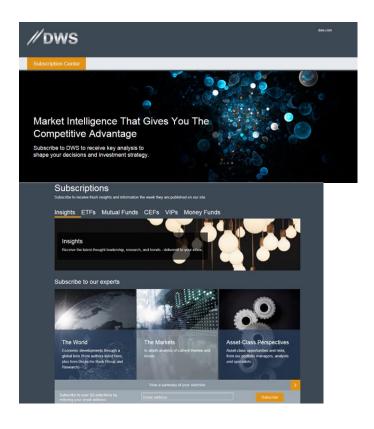
Source: Factset, DWS Investment GmbH as of 10/27/2023. Past performance may not be indicative of future results.

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