

The pre pandemic rollback: Where justified, overdone or more to go



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Distinguishing which pandemic effects were temporary versus long-lasting is key

After the initial sharp recession and bear market of early 2020, the pandemic brought strong S&P EPS growth and the highest PEs across the S&P 500 since 1999. As discussed previously in these notes, supercharged S&P EPS growth was led by its digital businesses and its consumer goods producers and retailers upon the pandemic's work and lifestyle shifts and huge government household stimulus. As we enter the second half of 2022, it's clear that goods demand has cooled upon fading stimulus, reversion to service consumption and, most importantly, the hit to consumer real purchasing power and confidence from the highest inflation rates in 40+ years. Given consumption pattern normalization and rising cycle longevity threats from high inflation and geopolitical conflict, investors are rolling back stocks to pre pandemic prices. We see these rollbacks as justified in some areas, but unjustified in others. The difference rests on assessing temporary versus long-lasting pandemic effects, more closely examining fair valuations relative to higher interest rates and considering world order uncertainty risks to healthy global growth.

Investors anchoring from Feb 2020 prices; first for rebound, now for rollback risk

The S&P 500 ended 2019 at 3230 and closed at 3386 on Feb 19, 2020, if S&P falls 8-12% more from its 2022 bear market low of 3666 it revisits pre pandemic prices. The Communications, Financials and REITs have fully rolled back to 2019 end or early 2020 highs. The only three sectors priced 20% or more above pre pandemic levels are Energy, Materials and Technology. The other sectors delivered moderate price or total returns. However, Consumer Discretionary performance varies greatly by industry since pre pandemic with rollbacks at apparel, housing, most of fast food, hotels, combustion cars, yet still large gains at electric vehicle despite the recent sharp decline, and still good gains at many mega-cap retailers and internet retailing. We think the rollback at most Retailers is justified, including internet retail, and see more downside for electric vehicles.

Inside, we show sector and all industry price gains from 2019 end. We see the rollback at Financials, especially Banks, as overdone given low PEs and rising overnight interest rates should aid EPS at Banks. We also see the Communications rollback as an overreaction to less of a stay at home economy. We think the rollback at Consumer Discretionary and Industrials is mostly justified, but largely complete, and from here see potential large upside at Aerospace, but more downside at Machinery. The gains at Staples were moderate, but we see this sector as less defensive in this environment and prefer REITs and Utilities. Health Care remains our most preferred sector. We think the sectors most at risk to further rollback are Materials and Technology on the risk of recession and/or higher interest rates.

Our sector strategy: Tilts toward Health Care, Banks and Domestic Defensives

With our new 12-month strategic cross-asset forecasts at DWS in mind (inside the note), we made adjustments to our sector strategy. We raise Energy from under-weight (UW) to equal-weight (EW), Real Estate from EW to over-weight (OW). We lower Tech from EW to UW. We also made changes to some industries: Auto Components and Road & Rail are moved from UW to OW; Diversified Financial Services from EW to OW; Gas Utilities and Wireless Telecommunication Services from UW to EW; Health Care Providers & Services from OW to UW; Tobacco from EW to UW. We currently OW Health Care, Communication Services as our preferred GARP (growth at a reasonable price) plays, Financials, Utilities and Real Estate in Value; EW Energy; UW Industrials, Tech, Consumer Discretionary, Consumer Staples and Materials.

DWS ad hoc CIO day: We cut our global equity indices targets by ~5%

Incoming inflation reports stayed persistently high and surprised central bankers. We now assume that the Fed Funds Rate reaches 3.5% by yearend, a level that we consider to be above "neutral", i.e. a level that is likely to start to slow down economic activities and lift unemployment. Germany remains exposed to the rising risk of gas import disruptions from Russia, which could trigger an energy crisis in Europe. Reflecting this deteriorating macro outlook we lower our June 2023 equity index targets by ~5%. Our new June 2023 targets for the S&P 500 is cut from 4,400 to 4,200, Stoxx 600 target from 460 to 430, MSCI Japan target from 1,200 to 1,150, and MSCI EM target from 1,110 to 1,060. We are still comfortable with our \$225 and \$235 S&P EPS estimates for 2022 and 2023. We lower our yearend S&P 500 target to 4,100 from 4,400 on EPS risk concerns.

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Global Equity Index Forecasts: 12-months

Index	Jun 2023F	NTM EPS Growth	Target PE
S&P 500	4,200	3.9%	18.2
EuroStoxx 50	3,650	3.0%	12.8
Stoxx 600	430	2.9%	13.3
MSCI Japan	1,150	6.4%	13.0
MSCI Asia xJ	695	3.9%	13.0
MSCI EM	1,060	0.1%	11.9

S&P 500 Outlook at Yearend

	2021	2022F	2023F
S&P 500	4766	4100	4400
Dividend Yield	1.4%	1.6%	1.6%
S&P EPS	\$210	\$225	\$235
Trailing PE	22.7	18.2	18.7
DPS	\$60.50	\$68	\$72

Next 5%+ Price Move

(Up / Balanced Risk / **Down**)

Risk of near-term correction

(Low / **Moderate** / High)

Taxable U.S. Investor Asset Allocations

Asset Class	Long-term	Current
Fixed Income/Cash	30-35%	33.5%
Equities	55-60%	55.5%
US Equities	40%	39.0%
S&P 500	35%	34.0%
Small Caps	0-10%	5.0%
Foreign DM	10-15%	10.5%
Foreign EM	0-10%	6.0%
Alternatives	10%	11%

Key CIO Views

Macro signal:	2021	Jun 2023F
U.S. Fed Funds rate	0-0.25%	3.25-3.50%
10yr Treasury yield	1.52%	3.25%
US IG Corp Spreads	100bp	180bp
US High Yield Spreads	340bp	570bp
Crude Oil (WTI) \$/bbl	75	110
EUR / USD FX rate	1.13	1.10

GDP Forecasts

Region	2021	2022F	2023F
US	5.7%	2.0%	0.8%
World	6.0%	t.b.d	t.b.d
Euro area	5.2%	2.9%	1.8%
China	8.1%	3.8%	5.3%
Japan	1.7%	1.7%	1.8%

* Q4/Q4 GDP growth

EPS = Earnings Per Share

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 6/30/2022 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.

Fed might trigger a technical recession to control inflation; rising risk of energy crisis in Europe; cutting June 23 targets by 5% and assuming falling profit margins in 2023

Incoming inflation numbers have come as a nasty surprise to central bankers. We now assume that Fed funds might reach 3.5% by year-end, a level that we would assume to be above “neutral”, i.e. a level that will start to slow down economic activities and lift unemployment. For the Eurozone we lift our June 2023 ECB (European Central Bank) deposit rate forecast from 0.75% to 2.0%. The detrimental impact of these rate hikes on GDP growth will probably be more pronounced in the US, where the economy is very sensitive to tightening financial conditions. As a result, we now assume a modest “technical recession” in H1 23 in the US: falling real wages and higher rates are expected to result in slower consumer spending, construction activity and less inventory build-up. In Europe, the negative impact should be less pronounced due to ongoing fiscal stimulus, post-Covid catch-up demand and a structurally lower sensitivity to higher interest rates than in the US. In Europe, the risk lies elsewhere: Germany remains exposed to the rising risk of gas imports from Russia being completely cut this summer and beyond, which would probably trigger an energy crisis in Europe. We have no model to predict Putin’s decision, but we feel that this risk scenario is no longer a tail risk.

Reflecting this deteriorating macro outlook we lower our June 2023 equity index targets by ~5%. Our new June 2023 targets for the S&P 500 / DAX40 are 4,200/13,900. After years of expanding profitability, we believe aggregate profit margins are likely to fall over the coming quarters. We now assume flat EPS in 2023 for developed markets. For the next 12 months our top-down earnings estimates are 5-11% below market consensus, and we expect companies and analysts to lower the outlook over the coming months. As a reference we remind investors that a “normal recession” has historically resulted in an approx. 15% EPS decline, while “severe recessions” have led to approximately 1/3 cut in earnings. We don’t expect such harsh cuts are required, as we expect 1) only a soft-patch, but no real recession, 2) balance sheets of companies and consumers are still in healthy shape 3) unlike in the dot.com bubble burst 2000, we expect most digital platforms to maintain strong earnings power.

With respect to valuation, we notice that equity markets remain highly sensitive to two factors: US real-rates and the VIX. We interpret volatility as a proxy for the aggregate equity risk premium. Near-term, we believe both measures are likely to remain elevated and might even rise from current levels. Therefore, we stick to our near-term caution on equity markets. On a 12-month horizon however, we remain constructive on equities, we believe chances are good for falling inflation/war/recession fears and a stabilization of US real rates. We try to capture the “Russia risk” by lifting the PE-discount relative to the S&P 500 to 36% for the DAX and 27% for the Stoxx 600 – both record levels.

With respect to EM equities, an argument can be made that we have already seen the required EPS adjustment. However, given the ongoing global uncertainty, we are not making a big call on the region.

Sector-wise, we continue to believe that Health Care remains attractive. Otherwise we refer to our unchanged sub-sector calls.

June 2023 equity index targets

FED might trigger a technical recession to control inflation; rising risk of energy crisis in Europe; cutting June 23 targets by 5% and assuming falling profit margins in 2023

Flat Earnings from 2023 onwards assumed

Index	3M View	Current Level	Previous Target CIO Day May	Target Jun 23	Chg in Target	Expected Total Return Jun 23	Assumptions								
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		27/06/2022					EPS growth NTM*	LTM multiple impact	Dividend Yield	EPS NTM* (e)	DWS vs. Cons.	Payout ratio	Target LTM P/E in Jun 23	Target PE discount to US	
S&P 500		3,923	4,400	4,200	-5%	8.7%	USD	3.9%	2%	1.7%	228	-5.4%	29%	18.2x	
Stoxx 600		415	460	430	-7%	7.1%	EUR	2.9%	0%	3.5%	32.2	-8.4%	45%	13.3x	-27%
EuroStoxx 50		3,539	3,900	3,650	-6%	6.9%	EUR	3.0%	0%	3.8%	285	-11.1%	47%	12.8x	-30%
DAX40		13,185	14,600	13,900	-5%	5.4%	EUR	5.1%	-4%	3.8%	1188	-5.6%	42%	11.7x	-36%
SMI		10,907	12,000	11,250	-6%	6.3%	CHF	-0.5%	4%	3.2%	677	-5.6%	51%	16.6x	-9%
FTSE 100		7,271	7,500	7,250	-3%	4.0%	GBP	6.1%	-6%	4.3%		-7.8%	46%	10.7x	-41%
MSCI EM		1,027	1,110	1,060	-5%	6.4%	USD	0.1%	3%	3.2%	89.0	-2.0%	37%	11.9x	-35%
MSCI AC Asia xJ		670	700	695	-1%	6.6%	USD	3.9%	0%	2.9%	53.8	-0.6%	36%	13.0x	-29%
MSCI Japan		1,198	1,200	1,150	-4%	1.8%	YEN	6.4%	-9%	2.5%	86.9	-6.7%	34%	13.0x	-29%
MSCI Australia		1,330	1,450	1,350	-7%	6.1%	AUD	1.5%	0%	4.6%	92.6	-9.9%	67%	14.6x	-20%

12 months- assumptions

1. Economic soft-patch in US, but no severe recession.
2. Peaking-profit margins: MSD EPS growth in 2022 but flat EPS in CY 2023 and 2024, 5-11% below consensus for NTM, implying negative EPS revisions to come and cautious company outlook comments
3. Unlike in the dot.com bubble 2000, we expect most digital platforms to maintain solid earnings power
4. Assuming US-real yields not rising above 0.5% and nominal yield to stabilize here, limiting the negative drag on PE multiples
5. Current Vix levels of 30 not sustainable over 12 months. Expected fall in equity risk premium key driver for global equities. Vix moving towards historical average of 15 should boost markets by approx. 10%
6. We increase Ukraine discount for DAX to 17% and leaving the EU discount at 10%
7. EM might have already seen most of EPS cuts

DWS Strategic CIO View: Overview of strategic forecasts – Fixed Income, FX, Equity & Commodities

Overview of Strategic 12-Month Forecasts

Fixed Income

		Strategic Forecast May-22	Current level	12m forwards	Strategic Forecast Jun-22	Forecast change	Expected 12m Total Return	Long-term 10yr Total Return p.a. ⁴
	Market Index	Target Jun-23	28-Jun-22	28-Jun-22	Target Jun-23			
Forecasts - US								
UST 2yr	US 2y yield	2.90%	3.12%	3.44%	3.00%	↗	3.55%	2.53%
UST 10yr	US 10y yield	3.25%	3.22%	3.37%	3.25%	→	2.93%	3.04%
UST 30yr	US 30y yield	3.40%	3.33%	3.38%	3.40%	→	2.16%	2.89%
Municipals	Muni HY Index OAS	200 bp	2.14%		2.50%	→	2.96%	2.38%
US IG Corp	BarCap US Credit	135 bp	137 bp		180 bp	↗	0.82%	3.06%
US HY ¹	Barclays US HY	460 bp	502 bp		570 bp	↗	4.49%	4.08%
Securitized / MBS	MBS Index OAS	48 bp	32 bp		55 bp	↗	2.30%	2.56%
Forecasts - Europe								
Schatz 2yr	GER 2y yield	0.80%	0.96%	1.48%	2.00%	↗	0.29%	0.49%
Bund 10yr	GER 10y yield	1.00%	1.64%	1.83%	2.25%	↗	-3.00%	0.24%
Bund 30yr	GER 30y yield	1.20%	1.84%	1.88%	2.50%	↗	-11.43%	0.13%
Gilt 10yr	UK 10y yield	2.00%	2.48%	2.64%	2.70%	↗	1.70%	2.14%
EUR IG Corp	ICE BofA Bond Index	135 bp	166 bp		150 bp	↗	0.72%	150%
EUR HY ¹	M L EUR Non-Fin HY Constr. Index	450 bp	512 bp		505 bp	↗	3.39%	3.91%
Securitized / Covered	iBoxx Covered	70 bp	83 bp		80 bp	↗	-0.63%	1.04%
Italy 10yr ³	GTITL10Y Corp - GTDEM 10Y Corp	180 bp	193 bp	201bp	180 bp	→	0.24%	n/a
Spain 10yr ³	GTESP10Y Corp - GTDEM 10Y Corp	110 bp	109 bp	117 bp	110 bp	→	-1.73%	n/a
Forecasts - AsiaPac								
JGB 2yr	JPN 2y yield	0.00%	-0.05%	0.00%	0.00%	→	-0.04%	-0.22%
JGB 10yr	JPN 10y yield	0.20%	0.24%	0.40%	0.20%	→	0.19%	0.19%
Asia Credit	JACI Index	290 bp	318 bp		320 bp	↗	6.34%	-
Forecasts - Global								
EUR vs USD	EUR/USD	1.10	1.05		1.10	→	2.31%	-
USD vs JPY	USD/JPY	125	136		130	↗	-1.49%	-
EUR vs JPY	EUR/JPY	138	143		143	↗	0.62%	-
EUR vs GBP	EUR/GBP	0.92	0.86		0.92	→	4.96%	-
GBP vs USD	GBP/USD	1.20	1.22		1.20	→	-2.15%	-
USD vs CNY	USD/CNY	6.75	6.7		6.75	→	1.23%	-
EM Sovereign ¹	EM BIG Div.	480 bp	504 bp		500 bp	↗	7.39%	5.69%
EM Credit ¹	CEMBI Broad	340 bp	377 bp		370 bp	↗	6.63%	5.50%

Benchmark Rates

		Strategic Forecast May-22	Current Level	Strategic Forecast Jun-22	Forecast change	Expected 12m Total Return	Long-term 10yr Total Return p.a. ⁴
	Market Index	Target Jun-23	28-Jun-22	Target Jun-23			
Forecasts – Benchmark rates							
United States	Federal funds rate	3.25-3.50	150-175	3.25-3.50	→		
Eurozone	Deposit rate	0.75	-0.50	2.00	↗		
United Kingdom	Repo rate	2.00	1.25	2.50	↗		
Japan	Overnight call rate	0.00	0.00	0.00	→		
China	1year lending rate	3.60	3.70	3.60	→		

Equities

Forecasts – Equity							
US	S&P 500	4,400	3,916	4,200	↘	8.94%	5.70%
Germany	DAX	14,600	13,295	13,900	↘	4.55%	5.68%
Eurozone	Eurostoxx 50	3,900	3,565	3,650	↘	6.19%	4.83%
Europe	Stoxx 600	460	418	430	↘	6.47%	4.89%
Japan	MSCI Japan	1,200	1,158	1,150	↘	1.77%	3.54%
SMI	SMI	12,000	10,851	11,250	↘	6.83%	5.23%
UK	FTSE 100	7,500	7,348	7,250	↘	2.97%	5.94%
Emerging Markets	MSCI EM	1,110	1,028	1,060	↘	6.36%	6.34%
Asia ex Japan	MSCI AC Asia ex Japan	700	670	695	↘	6.65%	6.57%
Australia	MSCI Australia	1,450	1,330	1,350	↘	6.10%	7.97%

Alternatives

Forecasts – Commodities							
Gold	Gold Spot	2,100	1,825	1,950	↘	6.87%	-0.24%
Oil - Spot ²	Brent Spot	110	118	110	→	-	n/a
Oil - Futures ²	Brent 12m Futures	-	98	-	-	12.81%	1.75%
Real Estate & Infrastructure							
Listed US RE						6.50%	4.14%
Non-Listed US RE						3.00%	7.15%
Listed Global RE						6.25%	3.70%
Non-Listed Global RE						1.50%	n/a
Listed Infrastructure						7.10%	5.40%

¹US HY default rate: 2.75%, 40% recovery, CCC average price of 89 used (instead of par); EUR HY default rate: 2.5%, 40% recovery; EM Sov default rate 6%, 50% recovery; EM Credit default rate 6%, 35% recovery // ²Oil-Forward used to calculate expected TR; forecasts are made on WTI-Spot // ³Total return. Excess return for Italy 10yr and Spain 10yr is 3.24% and 1.27%, respectively // ⁴LTCMA forecasts for Gold and Oil based on futures

DWS Global Macro Forecasts: Growth & Inflation Expectations

GDP GROWTH RATE

% year-on-year

	2021	2022F	2023F	Consensus 2022 (BBG)
World	6.0 (5.8)	t.b.d. (3.3)	t.b.d. (3.3)	
U.S. *	5.7	2.0 (2.9)	0.8 (2.2)	2.6 (3.2)
EUZ	5.2	2.9 (2.8)	1.8 (2.2)	2.7 (2.8)
GER	2.9	1.9 (2.7)	2.2 (3.2)	1.8 (2.2)
Japan	1.7	1.7 (2.0)	1.8 (1.8)	1.8 (2.1)
China	8.1	3.8 (4.5)	5.3 (4.8)	4.3 (5.0)

RECESSION IN U.S. / SLOWER GROWTH IN EUROPE

- U.S.: frontloaded Fed action to hit the brakes hard on the economy, we now expect a slowdown in Q4 and a mild recession in H1 2023.
- Euro area: global pent-up demand, high savings and improving labor market should prevent EA from falling into recession. We see a 40% probability for a recession due to cut off from Russian gas supply.
- Japan: slight downgrade for 2022 due to weak start into the year. Rebound expected over coming quarters. Japan still lagging its peers.
- China: 2022 growth revised down as Q2 dented by pandemic-related lockdown, weak state of property sector. 2023 revised up due to base effects, policy support measures, recovery in real estate/ consumption.

Inflation (CPI, core PCE for the U.S.)

% year-on-year average

	2021	2022F	2023F	Consensus 2022 (BBG)
World				
U.S. **	3.3	4.9 (4.7)	3.1 (2.9)	4.7
EUZ	2.5	8.0	3.7 (3.3)	7.1 (6.9)
GER	3.1	8.0	3.7 (3.3)	7.2 (6.1)
Japan	-0.2	1.9 (1.9)	1.7 (1.7)	1.8 (1.5)
China	0.9	2.3 (2.3)	2.3 (2.3)	2.2 (2.1)

- U.S. Inflation is expected to remain persistent through 2022, higher policy rates and ultimately loss of economic momentum will bring inflation rates closer to target but still above 2% by the end of 2023.
- EA inflation is spreading slowly from energy and food to core. Wage increases still below inflation but above inflation target.
- China: Inflation remains low as it is driven by the pork price cycle (dampening price pressure so far but rising in H2) and by subdued consumer demand.

Source: DWS Macro Research. (*) For the U.S., GDP growth Q4/Q4 % is 0.6% in 2022 and 1.6% in 2023, (**) Measure is average core PCE - Dec to Dec is 4.3% in 2022 and 2.4% in 2023; headline PCE (Dec/Dec) is 4.9% in 2022 and 3.4% in 2023 - average is 5.9% in 2022 and 3.4% in 2023 (***) Fiscal balance is federal deficit only. (****) Urban unemployment rate (end of period), not comparable to consensus data, (*****) China fiscal deficit refers to General Government Fiscal Deficit acc. IMF definition and forecast from April 2022, not comparable to consensus data. As of June 2022.

S&P 500 Sector and Industry views

	Market	Allocated	Sector	2020	2021	2022	Overweight	2020	2021	2022	Equal weight	2020	2021	2022	Underweight	2020	2021	2022
Over-weight	14.8%	19.3%	Health Care	21.4	16.7	15.8	Biotechnology Health Care Equipment & Supplies Health Care Technology Life Sciences Tools & Services Pharmaceuticals	14.7 31.0 31.7 31.9 21.1	11.0 23.3 28.3 24.9 16.0	11.7 22.6 25.9 24.9 13.8					Health Care Providers & Services	19.3	16.9	15.9
	9.0%	10.6%	Communication Services	16.8	15.8	16.0	Diversified Telecommunication Serv Entertainment Interactive Media & Services Media	8.3 36.6 32.5 14.7	7.7 24.8 18.6 12.3	8.9 20.1 18.8 11.6	Wireless Telecommunication Serv	7.3	4.9	4.0				
	10.9%	11.9%	Financials	17.7	11.1	12.1	Banks Diversified Financial Services Insurance	15.2 27.9 16.3	8.3 23.8 13.7	9.6 20.7 13.2					Capital Markets Consumer Finance	18.2 24.4	12.9 6.8	14.5 7.7
	3.0%	3.5%	Utilities	22.1	20.5	20.0	Electric Utilities Multi-Utilities	22.3 22.3	21.8 20.1	20.8 19.5	Gas Utilities Independent Power & Renewable E	25.1 12.3	20.9 7.4	20.8 8.9	Water Utilities	38.5	37.3	33.7
	2.9%	3.4%	Real Estate	25.5	21.1	21.0	Real Estate Mgmt. & Development REITs	27.2 25.5	13.7 21.9	12.2 21.4								
Equal-weight	4.5%	4.5%	Energy	-230	17.4	11.0	Energy Equipment & Services	100.2	30.6	20.0					Oil Gas & Consumable Fuels	-183	16.9	10.7
Under-weight	7.8%	7.5%	Industrials	41.8	24.2	18.6	Aerospace & Defense Electrical Equipment Industrial Conglomerates Road & Rail	43.7 28.5 27.4 23.5	29.9 20.5 20.9 21.0	22.7 18.1 19.9 17.7					Airlines Air Freight & Logistics Building Products Commercial Services & Supplies Construction & Engineering Machinery Professional Services Trading Companies & Distributors	-2.4 21.4 20.7 39.8 27.1 25.3 18.7 22.6	-4.9 14.1 17.1 29.4 22.1 17.3 22.3 20.1	23.2 14.5 15.3 29.1 18.8 16.2 19.3 16.6
	27.0%	25.9%	Information Technology	30.9	23.5	21.1	Communications Equipment Electronic Equipment IT Services	15.4 26.7 30.5	15.2 20.0 25.6	14.1 18.7 22.2					Semiconductors Software Technology Hardware Storage & Per	24.3 38.7 33.6	16.9 31.2 22.9	16.6 27.0 20.1
	10.8%	9.0%	Consumer Discretionary	45.9	27.1	24.2	Auto Components Hotels Restaurants & Leisure Household Durables	29.0 -103.0 10.3	20.5 753.7 7.0	19.3 31.2 5.8					Automobiles Distributors Internet & Direct Marketing Retail Leisure Products Multiline Retail Specialty Retail	77.2 25.1 59.7 22.2 20.0 25.0	32.1 17.5 48.1 16.4 16.4 15.5	30.9 17.0 46.1 16.4 15.5 16.7
	6.9%	4.3%	Consumer Staples	24.0	21.8	21.2	Textiles Apparel & Luxury Goods	39.5	23.5	20.7					Beverages Food Products Food & Staples Retailing Household Products Personal Products Tobacco	30.6 20.0 26.2 24.7 57.4 14.8	26.8 17.9 23.1 23.9 39.6 13.4	25.5 18.0 22.1 23.9 36.1 13.3
	2.6%	0.1%	Materials	28.2	15.0	13.9									Chemicals Construction Materials Containers & Packaging Metals & Mining	29.0 29.0 19.6 35.7	16.6 27.0 15.7 9.4	15.1 22.7 13.6 9.5
	Aggregate PE: DWS View						Overweight	23.5	17.0	16.3	Equalweight	12.5	10.2	9.1	Underweight	32.9	20.7	18.5
	S&P 500							3912			2020, 2021 & 2022 EPS	143.00	208.21	225.00	2020, 2021 & 2022 PE	27.4	18.8	17.4
											Bottom-up Consensus EPS	143.39	207.21	231.24	Bottom-up Cons. PE	27.3	18.9	16.9
															2020, 2021 & 2022 Ex Energy PE	25.4	17.9	17.9
															Bottom-up Cons. Ex Energy PE	26.1	18.7	17.7

Sector OW	8.01%
Sector UW	-8.52%
Industry OW	17.03%
Industry UW	-17.03%

Macro tilts:	
Cyclicals	-3.35%
Defensive	2.84%
Value	-5.21%
Growth	5.21%
Consumer	-4.39%
Services/experience	0.90%
Disc. Goods	0.21%
Retailing	-0.63%
Durables	0.87%
Staples Goods/Retail	-1.37%
Commodity	-2.17%
Energy	0.01%
Metals/Chemicals	-2.18%
Capex	3.44%
Capacity additions	1.83%
Productivity	1.61%
Health Care	4.42%
Innovation	2.78%
Marketers	1.72%
Insurers	-0.38%
Financials	0.97%
Up rates/low spreads	1.13%
Capital Markets	-0.88%
Insurance	0.72%
Bond Substitutes	1.35%
Weak FX \$ plays	0.63%
High R&D plays	4.46%
Transports	-0.68%
Geopolitical risk	-0.13%
Weak oil prices	-1.04%
Inflation shock	2.00%
Domestic GDP	-0.95%
Global GDP	-3.39%
Consumer TMT	0.52%
Trade sensitive	-1.29%

Note: Diversified Financial Services, Real Estate Management & Development and REITS moved from EW to OW; Gas Utilities, Wireless Telecommunication Services moved from UW to EW; Auto Components, Road & Rail moved from UW to OW; HC Providers & Services moved from OW to UW; Tobacco moved from EW to UW.

Note: More details on sector earnings forecast and sector intrinsic valuation can be found towards the back of this note.

Price as of 6/24/2022

Source: DWS Investment Management GmbH

Key metrics of S&P 500 by industry (table 1 of 2)

Sector	Industry	PE on 2022 Consensus EPS	PE on 2023 Consensus EPS	2022 Consensus EPS Growth	2023 Consensus EPS Growth	2022 EPS 3m Revision	3m Total Return Momentum
Consumer Discretionary		24.0	18.3	13.9%	31.6%	-12.2%	-25.7%
	Auto Components	15.4	11.1	8.8%	39.5%	-8.7%	-23.6%
	Automobiles	22.8	20.2	22.8%	12.8%	3.9%	-28.6%
	Household Durables	5.2	5.1	40.3%	2.4%	3.0%	-25.1%
	Leisure Products	15.3	13.7	-0.9%	11.9%	1.0%	-9.5%
	Textiles Apparel & Luxury Goods	20.1	17.2	11.3%	16.9%	-3.0%	-19.4%
	Hotels Restaurants & Leisure	32.4	17.9	2096.7%	80.4%	-14.5%	-17.5%
	Distributors	15.0	14.1	15.2%	6.2%	3.2%	-12.2%
	Internet & Direct Marketing Retail	102.1	35.9	-62.5%	183.9%	-61.5%	-34.1%
	Multiline Retail	17.5	14.3	-11.6%	22.2%	-22.1%	-21.6%
	Specialty Retail	15.4	14.1	8.4%	8.9%	0.0%	-18.7%
Consumer Staples		19.7	18.3	4.9%	7.4%	-1.4%	-7.2%
	Food & Staples Retailing	20.1	18.6	7.4%	8.2%	-1.4%	-17.8%
	Food Products	16.3	15.8	7.3%	3.0%	2.7%	-2.1%
	Beverages	23.8	21.8	6.9%	8.9%	-0.3%	-0.7%
	Tobacco	13.5	12.5	-0.5%	7.3%	-5.1%	-0.1%
	Household Products	22.4	20.5	2.1%	9.3%	-3.1%	-8.5%
	Personal Products	31.1	27.8	10.7%	12.2%	-5.9%	-13.9%
Energy		8.0	9.1	253.5%	-11.4%	37.0%	0.4%
	Energy Equipment & Services	20.0	13.9	83.8%	43.2%	-2.2%	-10.4%
	Oil Gas & Consumable Fuels	7.7	8.8	264.1%	-13.1%	38.8%	1.4%
Financials		11.8	10.4	-8.8%	13.9%	0.5%	-20.4%
	Banks	9.5	8.2	-15.7%	16.1%	2.3%	-21.7%
	Diversified Financial Services	20.3	18.5	19.9%	10.2%	2.0%	-21.7%
	Consumer Finance	8.1	7.9	-15.5%	2.1%	2.5%	-22.3%
	Capital Markets	13.3	11.7	-7.4%	13.8%	-4.0%	-23.4%
	Insurance	13.0	11.3	1.3%	15.3%	0.6%	-11.7%
Health Care		14.6	14.6	11.5%	0.0%	-1.9%	-12.2%
	Health Care Providers & Services	14.9	13.4	9.8%	10.8%	-0.2%	-11.2%
	Health Care Technology	N/A	N/A	N/A	N/A	N/A	N/A
	Health Care Equipment & Supplies	21.7	20.2	-2.3%	7.6%	-3.2%	-22.9%
	Life Sciences Tools & Services	23.5	21.6	-3.0%	8.5%	0.5%	-20.2%
	Biotechnology	10.5	12.2	4.7%	-14.6%	-0.2%	-8.4%
	Pharmaceuticals	12.4	12.7	27.3%	-2.6%	-3.9%	-3.1%

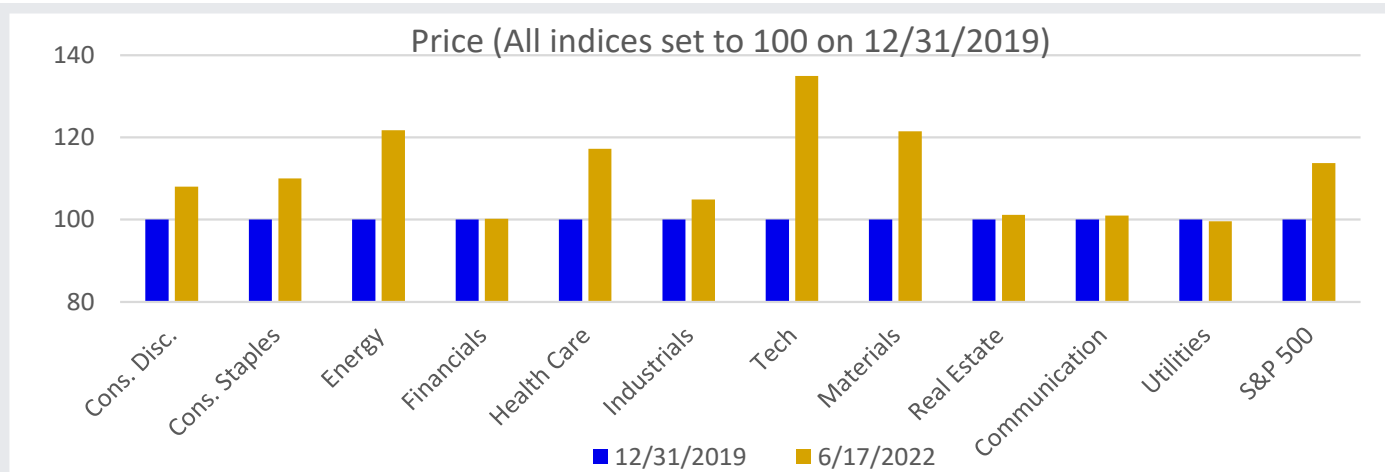
Source: Factset, DWS Investment GmbH as of 6/17/2022. Past performance may not be indicative of future results.

Key metrics of S&P 500 by industry (table 2 of 2)

Sector		PE on 2022 Consensus EPS	PE on 2023 Consensus EPS	2022 Consensus EPS Growth	2023 Consensus EPS Growth	2022 EPS 3m Revision	3m Total Return Momentum
Industrials		16.9	14.2	43.8%	19.2%	1.4%	-16.6%
	Aerospace & Defense	20.7	16.1	45.4%	28.6%	-7.6%	-11.2%
	Building Products	14.4	12.7	14.9%	13.6%	-1.5%	-25.2%
	Trading Companies & Distributors	14.9	13.4	37.7%	11.5%	7.0%	-19.3%
	Electrical Equipment	17.1	15.4	20.4%	11.2%	-1.4%	-21.9%
	Construction & Engineering	18.1	16.3	37.1%	11.1%	-0.6%	-10.0%
	Industrial Conglomerates	17.7	14.6	14.4%	21.0%	-1.2%	-16.0%
	Machinery	14.9	13.2	17.2%	12.4%	0.1%	-16.2%
	Commercial Services & Supplies	26.1	23.6	15.4%	10.6%	2.7%	-11.4%
	Professional Services	18.0	16.2	8.9%	10.8%	-1.1%	-21.7%
	Air Freight & Logistics	12.5	12.2	17.3%	2.3%	0.8%	-14.0%
	Airlines	18.5	6.0	123.1%	208.1%	2183.2%	-19.1%
	Road & Rail	17.0	15.6	19.9%	9.2%	1.6%	-21.2%
Information Technology		20.0	18.0	14.5%	11.2%	0.0%	-19.9%
	IT Services	25.2	21.9	15.7%	14.8%	-1.4%	-13.7%
	Software	25.4	21.9	16.0%	16.0%	0.0%	-18.5%
	Communications Equipment	14.0	13.0	5.9%	8.2%	-3.2%	-21.6%
	Technology Hardware Storage & Peripherals	19.4	18.3	12.0%	6.3%	-0.4%	-19.5%
	Electronic Equipment Instruments & Components	17.4	15.7	14.1%	10.8%	-0.1%	-18.1%
	Semiconductors & Semiconductor Equipment	14.2	12.9	16.5%	10.1%	1.4%	-26.7%
Materials		12.2	13.0	35.4%	-6.2%	10.9%	-12.6%
	Chemicals	13.1	13.1	36.3%	-0.2%	12.3%	-9.7%
	Construction Materials	22.8	18.0	19.5%	26.9%	-0.9%	-21.0%
	Metals & Mining	8.5	12.8	42.1%	-33.8%	12.6%	-20.5%
	Containers & Packaging	12.3	11.4	23.2%	7.3%	3.4%	-13.5%
Real Estate		17.5	16.6	93.9%	5.3%	2.2%	-16.2%
	Equity Real Estate Investment Trusts (REITs)	17.8	16.9	98.9%	5.2%	2.3%	-16.0%
	Real Estate Management & Development	11.3	10.4	22.6%	8.6%	1.8%	-23.0%
Communication Services		15.3	13.3	-0.9%	15.3%	-6.7%	-20.3%
	Diversified Telecommunication Services	8.3	8.3	-11.1%	-0.6%	-6.4%	3.9%
	Wireless Telecommunication Services	46.7	20.6	2.3%	126.7%	7.5%	0.3%
	Media	11.3	10.3	10.7%	9.1%	0.4%	-21.0%
	Entertainment	21.4	15.5	7.3%	38.0%	-26.2%	-33.3%
	Interactive Media & Services	17.9	15.2	-0.3%	17.8%	-3.8%	-21.8%
Utilities		18.7	17.3	-1.1%	8.0%	0.4%	-7.7%
	Multi-Utilities	18.5	17.4	1.6%	6.5%	0.5%	-7.4%
	Water Utilities	29.6	27.2	6.1%	8.6%	0.1%	-16.5%
	Gas Utilities	18.4	17.2	9.2%	7.1%	0.5%	-7.6%
	Electric Utilities	18.8	17.3	-2.8%	8.7%	0.3%	-7.2%
	Producers	12.0	11.0	2.4%	9.1%	-0.2%	-18.1%
S&P 500		16.0	14.7	17.6%	9.1%	1.0%	-17.3%

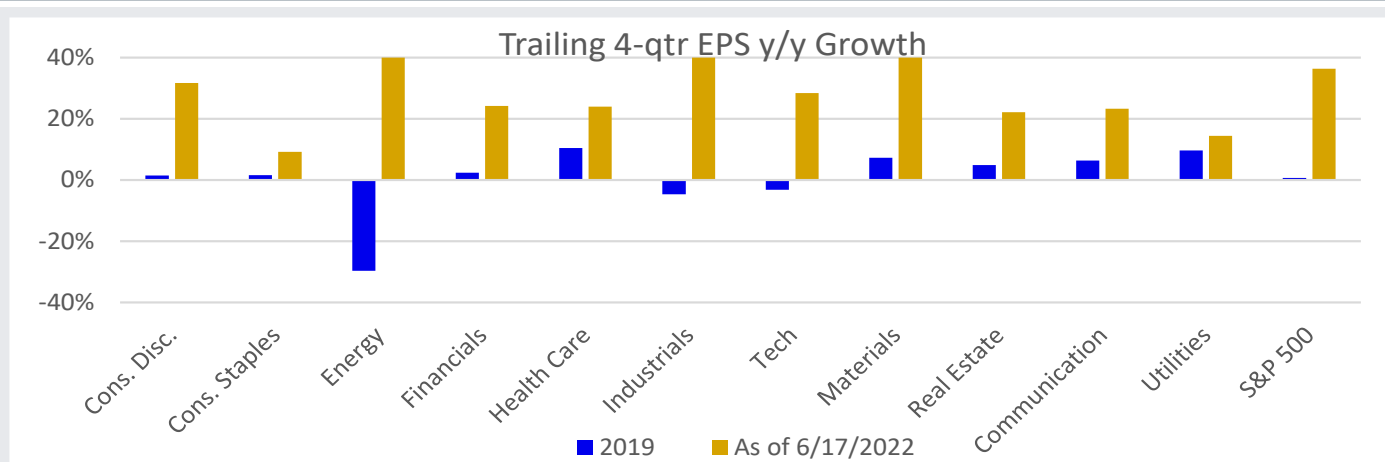
Source: Factset, DWS Investment GmbH as of 6/17/2022. Past performance may not be indicative of future results.

S&P 500 price by sector: Jun 17 2022 vs. 2019



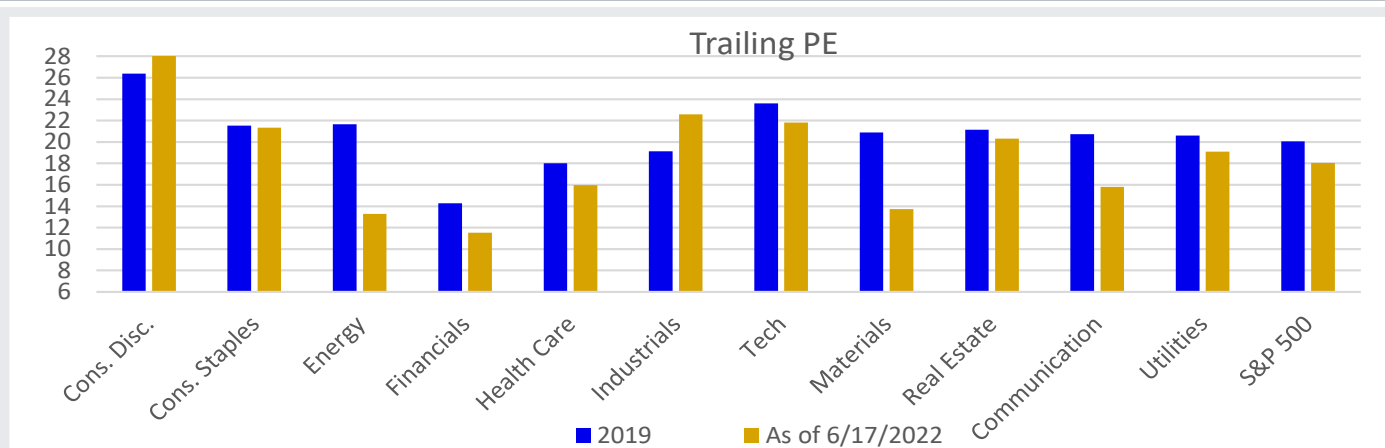
Source: Factset, IBES, DWS Investment GmbH as of 6/17/2022. Past performance may not be indicative of future results.

S&P 500 EPS growth by sector: Jun 17 2022 vs. 2019



Source: Factset, IBES, DWS Investment GmbH as of 6/17/2022. Past performance may not be indicative of future results.

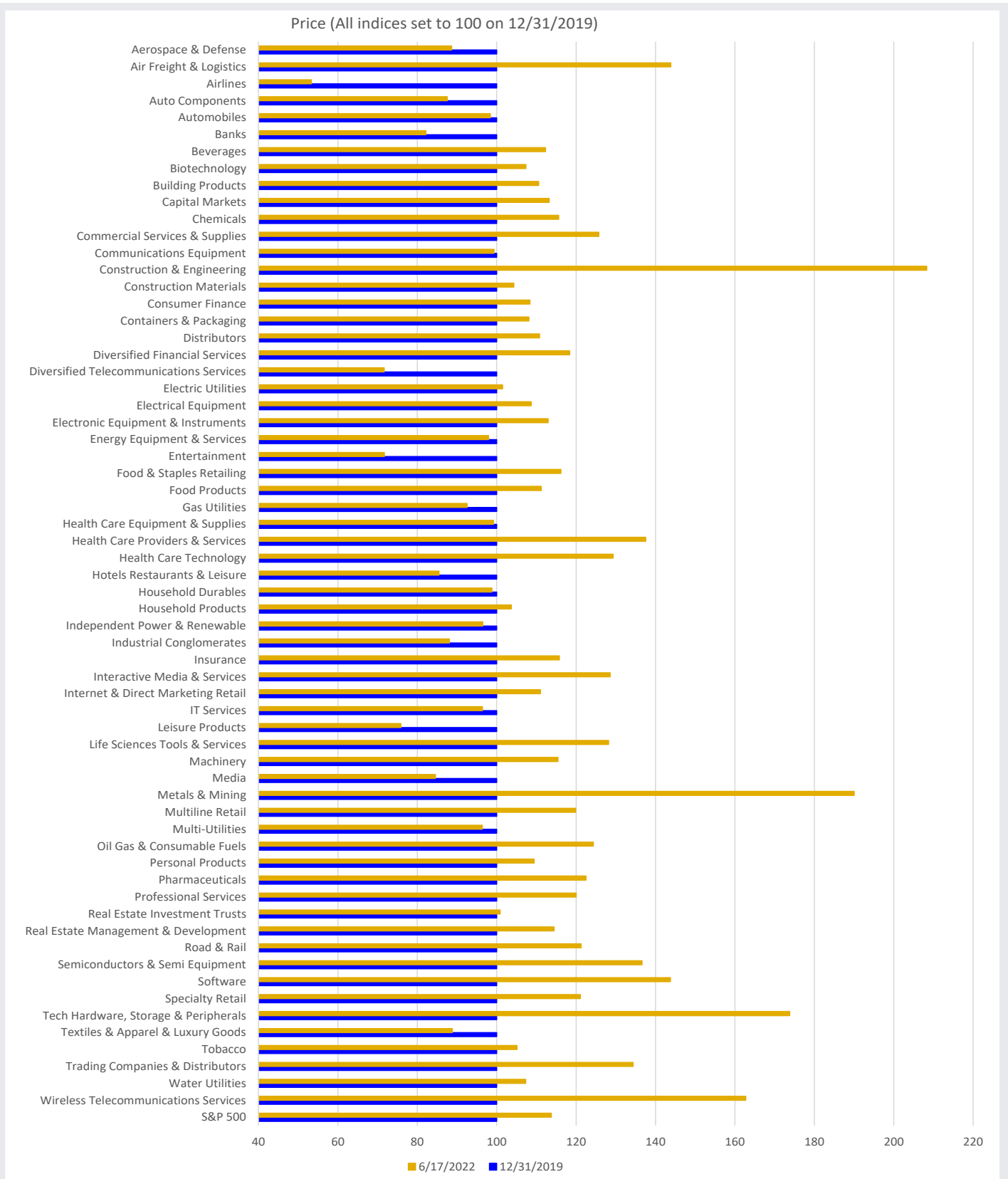
S&P 500 PE by sector: Jun 17 2022 vs. 2019



Source: Factset, IBES, DWS Investment GmbH as of 6/17/2022. Past performance may not be indicative of future results.

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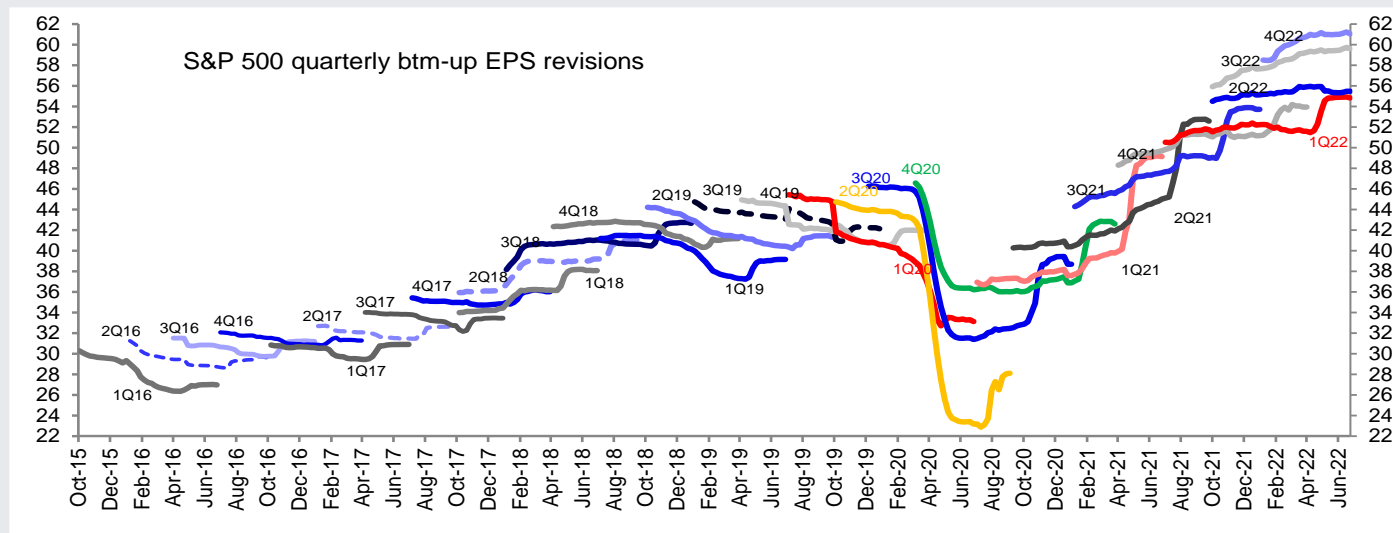
S&P 500 price by industry: Jun 17 2022 vs. 2019



Source: Factset, IBES, DWS Investment GmbH as of 6/17/2022. Past performance may not be indicative of future results.

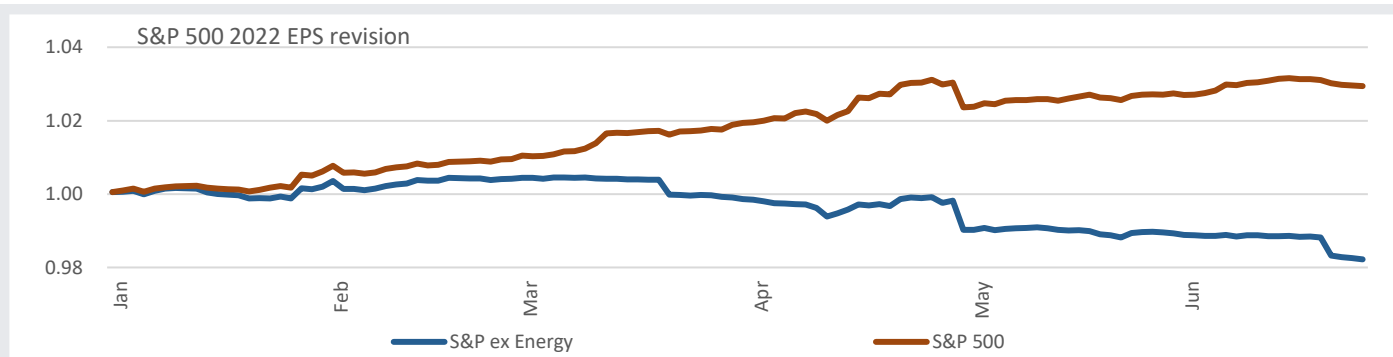
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S&P 500 quarterly EPS revision



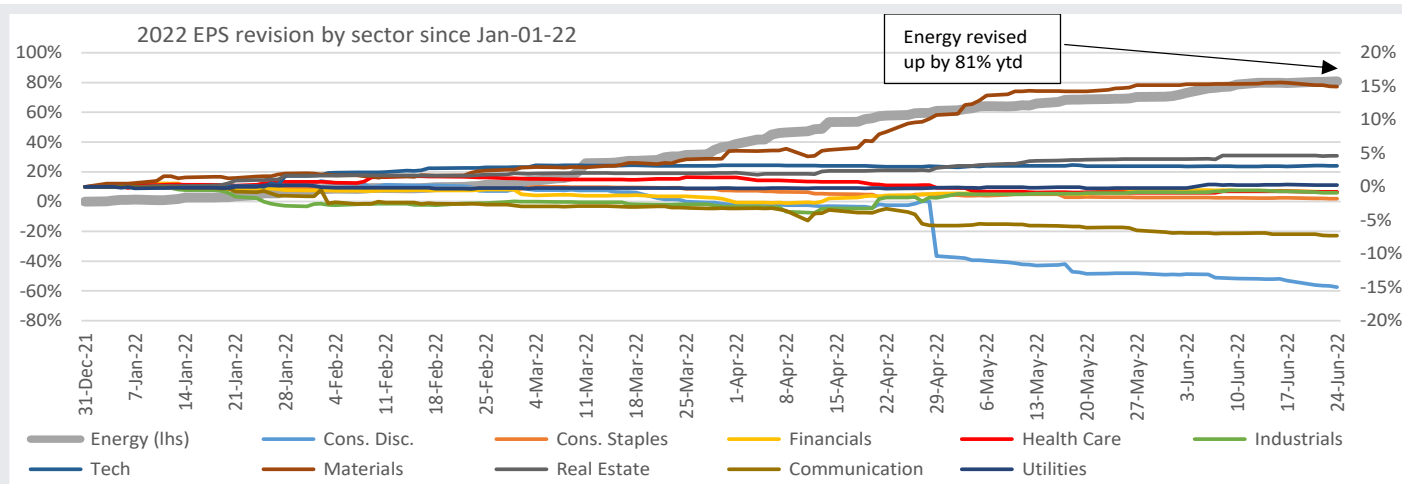
Source: Factset, IBES, DWS Investment GmbH as of 6/24/2022. Past performance may not be indicative of future results.

S&P 500 2022 EPS revision (ex. Energy)



Source: Factset, IBES, DWS Investment GmbH as of 6/24/2022. Past performance may not be indicative of future results.

S&P 500 2022 EPS revision by sector



Source: Factset, IBES, DWS Investment GmbH as of 6/24/2022. Past performance may not be indicative of future results.

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DWS Investment GmbH S&P 500 Annual EPS Outlook

	2014A	2015A	2016A	2017A	2018A	2019A	2020A	2021A	y/y	Bottom-up Consensus (IBES)				DWS View				Normalized 2022	
										2022E	y/y	2023E	y/y	2022E	y/y	2023E	y/y	(\$)	% of 2022
S&P 500 EPS (historical index)	\$118.82	\$117.46	\$118.10	\$132.00	\$161.93	\$162.93	\$139.72	\$208.12	49.0%										
S&P 500 EPS (current constituents)	\$115.97	\$116.52	\$116.71	\$129.34	\$156.09	\$161.45	\$143.39	\$208.21	46.7%	\$228.54	9.8%	\$250.87	9.8%	\$225	7.5%	\$235	4.1%	\$225	100%
Sector (\$ bn)																			
Communication Services	65.7	75.5	88.1	100.4	125.8	133.4	137.7	189.4	37.6%	184.8	-2.4%	211.9	14.7%	187.0	-1.3%	203.5	8.8%	187.0	100%
Consumer Discretionary	64.5	75.3	83.9	88.1	103.8	102.0	79.6	134.9	69.3%	143.3	6.2%	183.1	27.7%	151.0	12.0%	161.5	7.0%	154.3	102%
<i>Automobiles</i>	9.6	15.4	16.0	15.5	14.1	11.5	10.3	22.1	114%	26.8	21%	29.5	10%	23.0	4%	25.0	9%		
<i>Internet & Direct Marketing Retail</i>	5.6	6.2	8.1	8.6	16.2	17.7	20.0	23.9	19.9%	14.6	-39.0%	33.6	130.3%	25.0	4.4%	27.5	10.0%		
<i>CD ex Auto & Internet Retail</i>	49.3	53.7	59.8	63.9	73.5	72.8	49.3	88.8	80.0%	101.9	14.7%	119.9	17.7%	103.0	16.0%	109.0	5.8%		
Consumer Staples	77.5	75.9	78.2	82.4	89.2	89.6	93.4	102.7	9.9%	106.9	4.2%	115.2	7.7%	105.8	3.0%	109.0	3.1%	105.8	100%
Energy	95.9	40.0	10.8	37.7	71.1	50.3	-5.7	79.2	1489.7%	162.6	105%	146.9	-10%	125.0	57.8%	100.0	-20.0%	101.0	81%
Financials	171.4	186.3	188.0	195.4	242.2	249.2	198.7	328.5	65.4%	295.2	-10.1%	337.0	14.1%	300.0	-8.7%	320.5	6.8%	300.0	100%
Health Care	137.9	153.1	158.1	172.3	189.4	207.5	227.4	294.3	29.4%	309.1	5.0%	309.2	0.1%	310.0	5.3%	320.7	3.5%	310.0	100%
Industrials	99.9	103.8	97.5	106.1	129.5	123.7	63.4	108.1	70.5%	147.0	36.0%	173.6	18.1%	140.5	30.0%	155.0	10.3%	150.9	107%
<i>Airlines</i>	10.9	17.6	13.3	10.9	11.5	13.2	-28.8	-14.2	50.5%	3.0	121%	9.5	216%	3.0	121.1%	6.0	100.0%		
Information Technology	177.1	184.3	193.9	228.7	266.8	265.0	297.5	380.7	28.0%	422.4	11.0%	479.6	13.5%	425.0	11.6%	452.5	6.5%	425.0	100%
Materials	24.6	23.7	22.5	28.3	35.2	33.6	31.9	58.2	82.3%	70.2	20.5%	66.1	-5.9%	63.0	8.2%	57.5	-8.7%	55.0	87%
Real Estate	23.1	26.3	29.2	31.6	34.6	36.2	35.6	42.2	18.4%	44.9	6.4%	47.8	6.6%	42.5	0.7%	44.0	3.5%	42.5	100%
Utilities	31.3	31.6	33.8	35.3	38.9	42.9	44.2	47.2	6.8%	48.1	1.9%	51.8	7.7%	48.5	2.7%	51.5	6.1%	48.5	100%
S&P 500 (\$ bn)	969.0	975.6	983.9	1106.4	1326.5	1333.4	1203.8	1765.5	46.7%	1934.5	9.6%	2122.2	9.7%	1898.3	7.5%	1975.6	4.1%	1879.9	99%
S&P ex. Energy (\$bn)	873.0	935.7	973.1	1068.7	1255.4	1283.1	1209.5	1686.3	39.4%	1772.0	5.1%	1975.3	11.5%	1773.3	5.2%	1875.6	5.8%	1778.9	100%
S&P ex. Tech (\$bn)	791.9	791.4	790.0	877.6	1059.7	1068.4	906.3	1384.8	52.8%	1512.1	9.2%	1642.7	8.6%	1473.3	6.4%	1523.1	3.4%	1454.9	99%
S&P 500 Sales/Share (historical index)	\$1,163	\$1,127	\$1,151	\$1,232	\$1,339	\$1,415	\$1,362	\$1,567	15.0%										
S&P 500 Non-GAAP Net Margin	10.2%	10.4%	10.3%	10.7%	12.1%	11.5%	10.3%	13.3%											

S&P 500 EPS	Year	1Q	2Q	3Q	4Q
2019A	163	39	41	41	42
2020A	140	33	28	38	42
2021E	210	49	53	54	54
2022E	225	55	55	56	59
2023E	235	57	58	59	61

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 3/31/2022.

Source: Factset, DWS Investment GmbH as of 6/24/2022. Past performance may not be indicative of future results.

DWS Investment GmbH View: 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 2022 PE	2022E Earnings (\$bn)	Normal Ratio	Normal 2022E Earnings	Accounting Quality Adjustment	Fully Adjusted Earnings	Net Debt / Market Cap	Real CoE	Steady State Value	Growth Premium	2022 Start Fair Value (\$bn)	2021E Dividend Yield	2022 End Fair Value (\$bn)	PE on Normal 2022E EPS	2022 end Upside %
Communication Services	2,993	16.0	187.0	100%	187.0	-8%	172.0	15%	5.50%	3,128	-5%	2,972	1.5%	3,181	17.0	6%
Consumer Disc.	3,652	24.2	151.0	102%	154.3	-8%	141.9	12%	5.50%	2,580	24%	3,200	1.0%	3,441	22.3	-6%
Automobiles	710	30.9	23.0	105%	24.2	-10%	21.7	21%	6.00%	362	50%	543	0.2%	591	24.5	-17%
Internet & Direct Marketing Retail	1,152	46.1	25.0	100%	25.0	-5%	23.8	1%	5.50%	432	125%	972	0.0%	1,054	42.1	-8%
CD ex Auto & Internet Retail	1,790	17.4	103.0	100%	103.0	-10%	92.7	16%	5.50%	1,685	0%	1,685	1.8%	1,799	17.5	0%
Consumer Staples	2,237	21.2	105.8	100%	105.8	-5%	100.5	13%	4.75%	2,115	-3%	2,052	2.5%	2,159	20.4	-4%
Energy	1,381	11.0	125.0	81%	101.0	-10%	90.9	14%	6.00%	1,515	-15%	1,288	4.0%	1,352	13.4	-2%
Financials	3,634	12.1	300.0	100%	300.0	-8%	276.0		6.50%	4,246	-5%	4,034	2.1%	4,333	14.4	19%
Banks	1,250	9.6	130.0	100%	130.0	-8%	119.6		7.00%	1,709	-5%	1,623	3.4%	1,730	13.3	38%
Health Care	4,909	15.8	310.0	100%	310.0	-10%	279.0	9%	5.25%	5,314	0%	5,314	1.6%	5,670	18.3	15%
Industrials	2,613	18.6	140.5	107%	150.9	-8%	138.9	18%	5.50%	2,525	0%	2,525	1.4%	2,703	17.9	3%
Technology	8,948	21.1	425.0	100%	425.0	-5%	403.8	3%	5.50%	7,341	10%	8,075	1.0%	8,679	20.4	-3%
Materials	876	13.9	63.0	87%	55.0	-10%	49.5	15%	5.75%	860	-5%	817	2.0%	872	15.9	0%
Real Estate	891	21.0	42.5	100%	42.5	-7%	39.5	30%	4.50%	878	0%	878	3.0%	918	21.6	3%
Utilities	968	20.0	48.5	100%	48.5	-10%	43.7	61%	4.50%	970	0%	970	3.1%	1,012	20.9	5%
S&P 500 (\$ bn)	33,103		1898.3	99%	1879.9	-7.7%	1735.6		5.49%	31472.9	2.1%	32124.8	1.7%	34319.9		4%
S&P 500 Index (\$/sh)	3912	17.4	225.0	100%	225.0	-8.0%	207.0	11%	5.50%	3764	0.0%	3764	1.7%	4021	17.9	3%

	>5%
	between -5% and 5%
	<-5%

Source: IBES, DWS Investment GmbH as of 6/24/2022. 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 3/31/2022.

The estimated 2022 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 2022E S&P 500 EPS	\$225.00	DWS 2022E S&P 500 DPS	\$68.00	DWS 2022E S&P 500 aggregate ROE	21.4%	Fair long-term nominal return on S&P 500 index	8.50%
		2022E dividend payout ratio	30%	2021E end S&P 500 book value per share	\$1,050	Components of estimated fair S&P 500 return:	
DWS "normal 2022E" S&P 500 EPS	\$225.00	DWS "normal 2022E" S&P 500 DPS	\$68.00	DWS "normal 2022E" S&P 500 aggregate ROE	19.7%	+ Long-term real risk free interest rate	0.50%
"Normal 2022E" EPS / 2022E EPS	100%	Normal dividend payout ratio	33%			+ Long-term fair S&P 500 equity risk premium*	5.00%
Accounting quality adjustment to pro forma EPS	-\$18.00	EPS directed to net share repurchases	\$39.00	S&P EPS retained for true reinvestment	48%	= Long-term real S&P 500 cost of equity	5.50%
		Normal share repurchase payout ratio	19%	Estimated ROE on reinvested S&P EPS	8.50%	+ Long-term inflation forecast	3.00%
Normal 2022E S&P 500 EPS fair to capitalize	\$207	Total payout of S&P 500 EPS	\$107.00	Economic margin (EM) or ROE-CoE	0.00%	= S&P 500 nominal cost of equity	8.50%
Key principle: steady-state value = normal EPS / real CoE		Total payout ratio of normal and quality adj. EPS	52%	Sources of long-term earnings growth:		* S&P 500 ERP usually 300-400bps, w/ real CoE @ 5% - 6.5%	
				+ Long-term inflation forecast	3.00%	Fair S&P 500 Market Value and Book Value Multiple	
S&P 500 EPS Capitalization Valuation		S&P 500 DPS Discount Model		+ Fair return on true reinvestment	2.66%	2021E end S&P 500 book value per share	\$1,050
Normal EPS / (real CoE - (EM/payout) - EM):		Normal DPS / (nominal CoE - DPS growth):		+ Value added return on true reinvestment	0.00%	Fair PB = Fair PE * normal aggregate ROE	3.58
S&P 500 intrinsic value at 2022 start	3764	S&P 500 intrinsic value at 2022 start	3764	= Long-term earnings growth	5.66%	Fair PE =(inc ROE-g)/(inc real ROE*(real CoE-real g))	18.2
S&P 500 intrinsic value at 2022 end	4016	S&P 500 intrinsic value at 2022 end	4016	+ Growth from net share repurchases	1.04%	Implied S&P 500 fair value of book at 2022 start	3764
Implied fair fwd PE in early 2022 on 2022E \$225 EPS	16.7	Implied fair forward yield on 2022E DPS of \$68.0	1.81%	= Long-term S&P 500 EPS/DPS growth	6.69%	Steady-state PB = normal agg. ROE / real CoE	3.58
Implied fair trailing PE at 2022 end on 2022E \$225 EPS	17.8	Implied fair trailing yield on 2022E DPS of \$68.0	1.69%	= Total long-term return at constant PE	8.50%	Confirmed by fair steady-state PE = 1 / real CoE	18.2
Normal EPS / (real CoE-value added EPS growth)	3764	DPS discount model using true DPS (all payout)	3764	Value added growth premium in fair value est.	0%	Normal 2022E economic profit per share	\$149.25

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

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

		Normal 2022E S&P 500 EPS				
		\$215	\$220	\$225	\$230	\$235
Real cost of equity	5.00%	4578	4720	4864	5009	5156
	5.25%	4163	4281	4399	4518	4637
	5.50%	3818	3917	4016	4114	4213
	5.75%	3526	3610	3694	3777	3861
	6.00%	3276	3349	3421	3492	3563

Source: DWS Investment Management GmbH

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