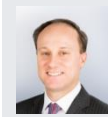


Stocking Stuffers: Beyond our big macro views and forecasts



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DWS

Stocking Stuffers: Additional investment themes and ideas for the new year
We've already shaped our key macro views and set our big benchmark forecasts for 2025 across asset classes at DWS, which are summarized by many exhibits inside this note and elsewhere. So, for our last Americas CIO View note of the year, we choose to highlight several secondary and additional viewpoints that could help investors navigate 2025.

Additional investment themes and views for 2025:

- 1. S&P Concentration: Record for top 3, 5, 10 stocks, but not for the top 50 or 100**
The 3 heaviest weighted stocks are 20% of the S&P 500 index and the top 10 are 35%. This is the highest concentration of top 10 stocks at the S&P 500 in over 50 years. We're constructive on these \$1trn+ cap stocks and acknowledge the demonstrated ability of many big enterprises to grow at superior rates vs. many smaller enterprises in the recent decades of globalization and digitalization. And the dawn of AI perhaps favors the big again given the resources and scale needed to deploy and monetize AI. Upon weighing benefits of enterprise scale vs. portfolio diversification, we prefer a small strategic under-weight of the top 10 reallocated to the next 40. We also prefer reallocating toward balanced from growth and to equal-weight S&P 500 or 100. We see value in active strategies that keep-up with the titans while providing diversification.
- 2. King dollar: USD likely climbs more vs. most currencies, but others can recover**
We expect the dollar to sustain its strength in 2025 and probably gain vs. key currencies like EUR as the ECB likely cuts more than the Fed. In our view, tensions between the new U.S. administration with Canada and Mexico are likely easily resolved in 2025 and CAD and MXN bounce. It's an uncertain outlook for Japanese yen, but we're reminded that Japan has attractive export goods and deep capital markets. Economic strength in Japan could boost JPN with BoJ hikes or weakness elsewhere seeking safe havens.
- 3. Commodities beyond oil: Trump promises cheap oil and affordable groceries**
The US produces more oil than Saudi Arabia and both have more capacity if pursued. If conflicts don't intensify oil prices likely drift downward, especially inflation adjusted. But cheaper oil makes many other things more affordable to consume and produce. We think cheaper oil can restoke the global appetite for proteins and crops, especially if China reinvigorates its middle class growth. Most of agriculture boomed as conflicts erupted in 2022, but cooled since; yet we think peace and cheap oil are best for ag. Many chemical and capital goods companies benefit when U.S. farms are strong.
- 4. Corporate tax rate cuts or new selective manufacturing/ production deductions?**
We expect more tax benefits for domestic manufacturers, especially if the ramp-up in tariffs is significant. However, we think a sizable broad based C-class corporate tax rate cut is less likely given the deficit. This could leave many retailers, financials and smaller service businesses without hoped for tax cuts next year. For now, we treat expected new tariffs and tax cuts as offsetting forces, both at the macro and industry level.
- 5. Industrial policy champion or shareholder relegation: Cars & Chips, Aerospace?**
The industrial policy door that Biden opened is unlikely to be shut by Trump, probably new doors. While we see neither tariffs nor industrial policies as optimal, as they favor certain industries with government support, the geopolitical risk reasons for such are real. We think US aerospace is the next likely champion. Civilian and defense aircraft and a new push for leadership in space. Yet, consider the outcome to shareholders thus far of US auto and chip makers that were eager to be selected as champions. Perhaps the suppliers to the champions are better positioned for economic gains.
- 6. A surge in US service exports is likely to come: Data centers and AI services**
The vast energy and capital needs of next generation data centers make it likely that most of the world will locate these facilities in the U.S. These facilities will host many new commercially available and proprietary AI services. The trade deficit could fade away this decade. We don't think this affects the dollar much, but what about rates?
- 7. Prevent electricity bill shock: All of the above energy and federal carbon credits**
AI will likely drive about 2% electricity demand growth in the US for the rest of the decade. We expect electric utilities to hike prices as they build expensive new generation capacity. If government structures and grants marketable carbon credits to utilities building this capacity, we think it would mitigate inflation and climate risk.

Contributor: Ju Wang, Equity Portfolio Manager

Global Equity Index Forecasts: 12-months			
Index	Dec 2025F	NTM EPS Growth	Target PE
S&P 500	6,500	12.2%	23.5
EuroStoxx 50	4,950	6.0%	13.6
Stoxx 600	525	6.0%	13.9
MSCI Japan	1,770	7.0%	15.3
MSCI Asia xJ	750	11.0%	14.1
MSCI EM	1,150	11.0%	13.2

S&P 500 Outlook at Yearend			
	2024F	2025E	2026E
S&P 500	6000	6500	6900
Dividend Yield	1.30%	1.30%	1.30%
S&P EPS	\$245	\$275	\$303
Trailing PE	24.5	23.6	22.8
DPS	\$76	\$84	\$90

Next 5%+ Price Move
(Up / **Balanced Risk** / Down)

Taxable U.S. Investor Asset Allocations		
Asset Class	Long-term	Current
Fixed Income/cash	31.5%	29.5%
Equities	58.5%	59.5%
US Equities	41%	41%
S&P 500	37%	37%
Small Caps	4%	4%
Foreign DM	12.5%	13.5%
Foreign EM	5%	5%
Alternatives	10%	11%

Key CIO Views		
Macro signal:	Nov 2024	Dec 2025F
U.S. Fed Funds rate	4.50%-4.75%	3.75%-4.00%
10yr Treasury yield	4.40%	4.50%
US IG Corp Spreads	95bp	85bp
US High Yield Spreads	310bp	325bp
Crude Oil (WTI) \$/bbl	69	65
EUR / USD FX rate	1.06	1.02

GDP Forecasts			
Region	2024F	2025F	2026F
US	2.7%	2.0%	2.2%
World	3.1%	3.1%	3.1%
Euro area	0.7%	0.9%	1.0%
China	4.9%	4.2%	4.0%
Japan	-0.1%	1.2%	0.7%

* 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 12/19/2024 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. Past performance may not be indicative of future results. Diversification neither assures a profit nor guarantees against loss. Forecasts are not a reliable indicator of future returns.

Key views after US Elections and into 2025

- A long-lasting US economic expansion is likely given pro growth Trump policies. It remains to be seen if inflation fully returns to the Fed's 2.0% target.
- The US is likely to slow to 2.0% real growth in 2025 with core inflation also slowing to 2.4%. We believe service inflation will pose some challenges.
- Growth is expected to return to a 2.0-2.5% trend in 2026 with core inflation in the same range. A golden expansion is within reach with good policies.
- Monetary policy is expected to normalize by 2026 with the Fed Funds rate expected to be between 3.5-4.0% and the 10yr Treasury yield at roughly 4%.
- US deficits are too high with a roughly 7% of GDP outlook. Fiscal policy dynamics will likely affect the speed and magnitude of monetary policy normalization.
- Trump returns:
 - Markets now expect deregulation and some tax cuts.
 - We expect new and higher tariffs to be imposed on China. Probably not as high as 60%, at least not at first.
 - We remain doubtful of tariffs on all imports and we think that if tariffs surprise to the upside, then corporate tax cuts will surprise to the upside.
- Risks to the longevity of the US expansion include geopolitical and other external shocks, risks which appear elevated, but secularly upward bond yields on rising long-term deficit and inflation risks are probably the greatest domestic or homemade threat to the health of the US economy and asset values.
- Artificial Intelligence (AI) is expected to keep US productivity at healthy levels of 2%, despite the challenges of demographics and slowed globalization.
- AI and related investment spending and innovation should sustain S&P EPS growth at 10% through 2026 despite moderate US and global growth rates.
- We expect AI to boost economic growth and productivity and improve the quality of life in many difficult to measure ways, but much of AI will be free.
- Tech and digital business likely AI winners. But other perhaps more under appreciated winners include Health Care, Financials and Electric Utilities.
- The S&P 500 is a digital business dominated index. Neither US nor global GDP are its key growth drivers. We expect muted but decent returns from the S&P's Tech titans over the next few years, given high expectations in valuations, but we see undervalued growth and innovation potential at Health Care.

DWS Global Macro Forecasts

GDP Growth Rate

% year-on-year average

	2024E	2025F	2026F	Consensus 2025 (BBG)
World	3.1	3.1 (3.2)	3.1	
U.S.	2.7 (2.4)	2.0 (1.7)	2.2	1.9
EUZ	0.7	0.9 (1.0)	1.0	1.2
GER	-0.1 (0.1)	0.6 (1.0)	0.9	0.8
UK	1.0	1.2	1.1	1.3
Japan	-0.1 (0.0)	1.2	0.7	1.2
China	4.9 (4.8)	4.2 (4.4)	4.0	4.5

Inflation (CPI)

% year-on-year average

	2024E	2025F	2026F	Consensus 2025 (BBG)
World				
U.S.	2.9	2.4 (2.3)	2.4	2.3
EUZ	2.3 (2.5)	2.0 (2.3)	2.0	2.0
GER	2.5 (2.6)	2.3 (2.5)	2.1	2.1
UK	2.5 (2.6)	2.3 (2.4)	2.1	2.3
Japan	2.5 (2.3)	2.0 (2.0)	1.8	2.0
China	0.5	1.3 (1.7)	1.4	1.3

Unemployment Rate (Annual average)

%

	2024E	2025F	2026F	Consensus 2025 (BBG)
U.S. (EOP)	4.1 (4.3)	4.2 (4.1)	4.2	4.3
EUZ	6.4 (6.6)	6.3 (6.6)	6.3	6.5
GER	6.0 (6.0)	6.1 (5.9)	5.8	6.1
UK	4.4	4.5	4.5	4.4
Japan	2.5 (2.4)	2.4 (2.4)	2.4	2.5
China***	5.1 (5.0)	5.0	5.0	5.1

Fiscal Balance

% of GDP

	2024E	2025F	2026F	Consensus 2025 (BBG)
U.S.	-6.6 (-6.0)	-7.3 (-5.9)	-7.0	-6.5
EUZ	-2.8	3.0	3.0	-2.7
GER	-2.1 (-1.5)	-1.8 (-1.0)	-2.5	-1.5
UK	-4.5 (-4.0)	-3.7	-3.5	-3.0
Japan	-6.0 (-5.0)	-4.0 (-3.0)	-3.0	-3.5
China****	-13.2 (-13.3)	-13.1	-13.0	-5.0

(***) Urban unemployment rate (end of period), not comparable to consensus data, (****) China fiscal deficit refers to augmented fiscal balance (widest definition) and refers to IMF, latest IMF estimate from August 2024. Note: this does not include the policy measures announced Sep24 and early Oct It's not comparable with the consensus. E – Estimate, F – Forecast, BBG - Bloomberg. As of December 2024.

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. Past performance is not indicative of future returns.

Source: Bloomberg Finance LP, DWS Macro Research as of December 2024.

DWS Strategic CIO Forecasts

Overview of Strategic 12-Month Forecasts

Fixed Income		Strategic Forecast Sep-24	Current level	12m forwards	Strategic Forecast Nov-24	Forecast change	Expected 12m Total Return	10yr Total Return (p.a.) ⁴
Market Index	Target Sep-25	15-Nov-24	15-Nov-24	Target Dec-25				
Forecasts - US								
UST 2yr	US 2y yield	3.60%	4.34%	4.26%	4.20%	↗	4.47%	3.42%
UST 10yr	US 10y yield	4.05%	4.47%	4.49%	4.50%	↗	4.58%	4.28%
UST 30yr	US 30y yield	4.15%	4.64%	4.61%	4.65%	↗	4.54%	4.47%
Municipals	Taxable Muni Index OAS	75	67		75	→	2.42%	3.49%
US IG Corp	BarCap US Credit	80 bp	73 bp		85 bp	↗	4.26%	4.50%
US HY ¹	Barclays US HY	400 bp	254 bp		325 bp	↘	3.95%	5.41%
Securitized / MBS	MBS Index OAS	120 bp	137 bp		120 bp	→	4.59%	3.93%
Forecasts - Europe								
Schatz 2yr	GER 2y yield	2.00%	2.13%	1.84%	1.75%	↘	2.24%	1.90%
Bund 10yr	GER 10y yield	2.25%	2.36%	2.40%	2.20%	↘	4.28%	2.04%
Bund 30yr	GER 30y yield	2.50%	2.57%	2.58%	2.50%	→	4.22%	3.02%
Gilt 10yr	UK 10y yield	4.00%	4.49%	4.52%	4.00%	→	8.50%	4.28%
EUR IG Corp	ICE BofA Bond Index	95 bp	99 bp		95 bp	→	4.73%	3.20%
EUR HY ¹	ML EUR Non-Fin HY Constr. Index	400 bp	324 bp		400 bp	→	3.53%	4.66%
Securitized / Covered	iBoxx Covered	50 bp	52 bp		50 bp	→	4.26%	2.75%
Italy 10yr ³	GTITL10Y Corp - GTDEM 10Y Corp	180 bp	119 bp	130 bp	150 bp	↘	3.00%	n/a
Forecasts - AsiaPac								
JGB 2yr	JPN 2y yield	0.70%	0.55%	0.62%	0.80%	↗	0.46%	0.56%
JGB 10yr	JPN 10y yield	1.40%	1.07%	1.25%	1.40%	→	-0.62%	0.75%
Asia Credit	JACI Index	200 bp	133 bp		125 bp	↘	6.54%	-
Forecasts - Global								
EUR vs USD	EUR/USD	1.08	1.05		1.02	↘	-5.21%	-
USD vs JPY	USD/JPY	140	155		145	↗	-2.83%	-
EUR vs JPY	EUR/JPY	151	163		148	↘	-7.77%	-
EUR vs GBP	EUR/GBP	0.84	0.83		0.82	↘	-3.91%	-
GBP vs USD	GBP/USD	1.29	1.26		1.25	↘	-0.84%	-
USD vs CNY	USD/CNY	7.15	7.2		7.45	↗	4.83%	-
EM Sovereign ¹	EMBIG Div.	390 bp	325 bp		390 bp	→	3.44%	6.41%

Benchmark Rates

Benchmark Rates		Strategic Forecast Sep-24	Current Level	Strategic Forecast Nov-24	Forecast change	Expected 12m Total Return	10yr Total Return (p.a.) ⁴
Market Index	Target Sep-25	15-Nov-24	Target Dec-25				
Forecasts - Benchmark rates							
United States	Federal funds rate	3.75-4.00	4.50-4.75	3.75-4.00	→		
Eurozone	Deposit rate	2.50	3.25	2.00	↘		
United Kingdom	Repo rate	3.75	4.75	3.00	↘		
Japan	O/N Call Rate	0.75	0.25	1.00	↗		
China	1 year lending rate	3.10	3.10	2.75	↘		

Equities

Equities		Strategic Forecast Sep-24	Current Level	Strategic Forecast Nov-24	Forecast change	Expected 12m Total Return	10yr Total Return (p.a.) ⁴
Market Index	Target Sep-25	15-Nov-24	Target Dec-25				
Forecasts - Equity							
US	S&P 500	5,800	5,894	6,500	↗	11.58%	5.70%
Germany	DAX	20,000	19,223	20,500	↗	6.64%	4.86%
Eurozone	Eurostoxx 50	5,100	4,806	4,950	↘	6.50%	5.18%
Europe	Stoxx 600	540	504	525	↘	7.75%	6.17%
Japan	MSCI Japan	1,760	1,663	1,770	↗	8.82%	4.35%
SMI	SMI	12,350	11,632	12,050	↘	6.99%	6.37%
UK	FTSE 100	8,350	8,067	8,150	↘	5.03%	7.86%
Emerging Markets	MSCI EM	1,140	1,084	1,150	↗	8.95%	6.96%
Asia ex Japan	MSCI AC Asia ex Japan	740	704	750	↗	9.08%	7.11%
Australia	MSCI Australia	1,550	1,649	1,650	↗	3.67%	7.17%

Alternatives

Alternatives		Strategic Forecast Sep-24	Current Level	Strategic Forecast Nov-24	Forecast change	Expected 12m Total Return	10yr Total Return (p.a.) ⁴
Market Index	Target Sep-25	15-Nov-24	Target Dec-25				
Forecasts - Commodities							
Gold - Spot	Gold Spot	2,600	2,571	2,800	↗	-	n/a
Gold - Futures	Gold 12m Futures	-	2,697	-	-	3.84%	0.63%
Oil - Spot ²	Brent Spot	80	72	69	↘	-	n/a
Oil - Futures ²	Brent 12m Futures	-	70	-	-	-1.78%	8.95%
Carbon	Carbon 12m Futures	80	68	75	↘	10.57%	-
Real Estate & Infrastructure							
Listed US RE (LC)						8.50%	4.46%
Non-Listed US RE (LC)						6.00%	4.82%
Listed Global RE (LC)						8.00%	4.05%
Non-Listed European RE (LC)						8.00%	4.13%
Non-Listed APAC RE (LC)						5.00%	4.27%
Non-Listed Global RE (LC)						6.60%	4.46%
Listed Infrastructure (LC)						8.50%	7.02%
Non-Listed Infrastructure (LC)						11.00%	13.28%

¹US HY default rate: 2.25%, 40% recovery, CCC average price of 80 used (instead of par); EUR HY default rate: 3.00%, 50% recovery; EM Sov default rate 0%, 50% recovery; // ²Oil-Futures used to calculate expected TR; forecasts are made on Brent-Spot // ³Total return. Excess return for Italy 10yr is -0.60% // ⁴LTCMA forecasts for Gold and Oil based on futures

Source: Bloomberg Finance L.P., DWS Investment GmbH as of December 2024. Alternative investment may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. No assurance can be given that any forecast or target will be achieved. DWS expectations/forecasts as of December 1, 2024. 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.

DWS September 2025 Equity Index Targets

Index	3M relative View	Current Level	Previous Target CIO Day Sep	Target Dec 25	Chg in Target	Expected Total Return Dec 25	----- thereof -----			Assumptions				
							USD	EPS growth NTM*	LTM multiple impact	Dividend Yield	EPS NTM* (e)	EPS NTM DWS vs. Cons.	Target LTM P/E in Dec 25	Target PE discount to US
S&P 500		5,984	5,800	6,500	12%	10.0%	USD	12.2%	-4%	1.3%	275	0.1%	23.5x	
Stoxx 600		502	540	525	-3%	8.2%	EUR	6.0%	-2%	3.6%	37.9	-2.5%	13.9x	-41%
EuroStoxx 50		4,745	5,100	4,950	-3%	7.9%	EUR	6.0%	-2%	3.5%	366	-1.8%	13.6x	-42%
DAX40		19,034	20,000	20,500	2%	7.7%	EUR	6.6%	-3%	3.0%	1450	-4.0%	13.7x	-42%
SMI		11,712	12,350	12,050	-2%	6.3%	CHF	9.0%	-6%	3.4%	736	-0.1%	16.4x	-30%
FTSE 100		8,026	8,350	8,150	-2%	5.6%	GBP	4.0%	-2%	4.0%		-2.9%	11.8x	-50%
MSCI EM		1,103	1,140	1,150	1%	7.1%	USD	11.0%	-4%	2.9%	87.7	-6.0%	13.2x	-44%
MSCI AC Asia xJ		718	740	750	1%	7.1%	USD	11.0%	-4%	2.6%	53.3	-5.9%	14.1x	-40%
MSCI Japan		1,687	1,760	1,770	1%	7.3%	YEN	7.0%	-1%	2.4%	115.6	-0.9%	15.3x	-35%
MSCI Australia		1,652	1,550	1,650	6%	3.5%	AUD	2.0%	-1%	3.6%	89.8	0.1%	18.6x	-21%

12 months- assumptions

- (Geo)politics:** Ukraine – no war extension into NATO; Israel - no oil price above \$100; Taiwan – no escalation;
- DM Economies:** 2025 US: at trend, lower taxes, somewhat higher tariffs; EU: below trend; China – stabilizing real estate problems
- Interest rates:** US 10y yields remain below 5.0%; FED with 2x 25bp cuts
- Earnings growth:** EPS growth 8% MSCI AC World; M7 keep delivering ~15% EPS growth next 2 years;
- US valuation:** lifting trailing PE in 12 months of from 21.6x (last CIO day) towards 23.3x, clearly above historical 18x
- European valuation:** weak economy and pan-Europe earnings growth below ROW resulting record high PE-discount to S&P 500
- Japan:** not expecting a second “carry-unwind” like in early August 2024, Yen forecast: 145 to USD
- EM/Asia:** double digit EPS growth again driven by Asia (80% contribution, China 30%, Taiwan & Korea 35%), especially semis, but 5% fx EPS headwind vs. USD; watching out for trend change in negative EPS revisions

Cons – Consensus, LTM – Last twelve month, NTM – Next twelve month, EPS – Earnings per share, Chg – Change, P/E – Price to earnings ratio

Source: DWS Investment GmbH as of December 2024, for illustrative purposes only. This material is for informational purposes only and sets forth our views as of this date. 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. The underlying assumptions and these views are subject to change without notice. Past performance is not indicative of future returns.

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 2025E S&P 500 EPS	\$275.00	DWS 2025E S&P 500 DPS	\$85.00	DWS 2025E S&P 500 aggregate ROE	25.0%	Fair long-term nominal return on S&P 500 index	7.75%
		2025E dividend payout ratio	31%	2024E end S&P 500 book value per share	\$1,100	Components of estimated fair S&P 500 return:	
DWS "normal 2025" S&P 500 EPS	\$280.00	DWS "normal 2025E" S&P 500 DPS	\$85.00	DWS "normal 2025E" S&P 500 aggregate ROE	24.1%	+ Long-term real risk free interest rate	2.00%
"Normal 2025E" EPS / 2025 EPS	102%	Normal dividend payout ratio	32%			+ Long-term fair S&P 500 equity risk premium*	3.25%
Accounting quality adjustment to pro forma EPS	-\$15.00	EPS directed to net share repurchases	\$75.00	S&P EPS retained for operating reinvestment	40%	= Long-term real S&P 500 cost of equity	5.25%
		Normal share repurchase payout ratio	28%	Estimated ROE on reinvested S&P EPS	9.00%	+ Long-term inflation forecast	2.50%
Normal 2025E S&P 500 EPS fair to capitalize	\$265	Total payout of S&P 500 EPS	\$160.00	Economic margin (EM) or ROE-CoE	1.25%	= S&P 500 nominal cost of equity	7.75%
Key principle: steady-state value = normal EPS / real CoE		Total payout ratio of normal and quality adj. EPS	60%	Sources of long-term earnings growth:		* S&P 500 ERP history 300-400bps, w/ real CoE @ 5% - 6%	
<u>S&P 500 EPS Capitalization Valuation</u>		<u>S&P 500 DPS Discount Model</u>		+ Long-term inflation forecast	2.50%	<u>Fair S&P 500 Market Value and Book Value Multiple</u>	
Normal EPS / (real CoE - (EM/payout) - EM):		Normal DPS / (nominal CoE - DPS growth):		+ Fair return on operating reinvestment	2.08%	2024E end S&P 500 book value per share	\$1,100
S&P 500 intrinsic value at 2025 start	5982	S&P 500 intrinsic value at 2025 start	5982	+ Value added earnings growth on op. reinvestment	0.50%	Fair PB = Fair PE * normal aggregate ROE	5.44
S&P 500 intrinsic value at 2025 end	6361	S&P 500 intrinsic value at 2025 end	6361	= Long-term earnings growth	5.08%	Fair PE =(inc ROE-g)/(inc real ROE*(real CoE-real g))	21.75
Implied fair fwd PE in early 2025 on 2025E \$275 EPS	21.8	Implied fair forward yield on 2025E DPS of \$85.0	1.42%	+ Growth from net share repurchases	1.25%	= Long-term S&P 500 EPS/DPS growth	6.33%
Implied fair trailing PE at 2025 end on 2025E \$275 EPS	23.1	Implied fair trailing yield on 2025E DPS of \$85.0	1.34%	= Total long-term return at constant PE	7.75%	Implied S&P 500 fair value of book at 2025 start	5982
				+ Fair normal dividend yield	1.42%	Steady-state PB = normal agg. ROE / real CoE	4.59
						Confirmed by fair steady-state PE = 1 / real CoE	19.0
Normal EPS / (real CoE - value added EPS growth)	6326	DPS discount model using true DPS (all payout)	6361	Value added growth premium in fair value est.	18.5%	Normal 2025E economic profit per share	\$207.25

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

2025E S&P 500 Normalized EPS

	\$270	\$275	\$280	\$285	\$290
4.75%	6739	6941	7147	7358	7573
5.00%	6353	6540	6731	6925	7123
5.25%	6010	6184	6361	6541	6724
5.50%	5703	5866	6031	6199	6369
5.75%	5427	5579	5734	5891	6051

Source: DWS Investment Management GmbH as of December 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. For illustrative purposes only. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

S&P 500 Fair Value by Sector

Assuming a 5.25% real cost of equity (CoE) for overall S&P 500

	Market Value (\$bn)	Current 2025 PE	2025E Earnings (\$bn)	Normal Ratio	Normal 2025E Earnings	Accounting Quality Adjustment	Fully Adjusted Earnings	Net Debt / Market Cap	FCF / EPS	Real CoE	Steady State Value	Growth Premium	2025 Start Fair Value (\$bn)	2025E Dividend Yield	2025 End Fair Value (\$bn)	Fair PE on Normal 2025 EPS	2025 End Upside %	2025 End Upside vs. S&P 500
Communication Services	5,062	20.7	245.0	100%	244.8	-5%	232.6	11%	0.83	5.10%	4,560	20%	5,472	0.8%	5,842	23.9	15%	11%
Consumer Discretionary	5,956	29.8	200.0	105%	209.7	-6%	197.1	10%	0.76	5.25%	3,755	39%	5,200	0.6%	5,572	26.6	-6%	-10%
<i>Automobiles</i>	1,439	47.2	30.5	110%	33.6	-10%	30.2	32%	0.99	5.75%	525	50%	788	0.2%	851	25.4	-41%	-45%
<i>Broadline (Internet) Retail</i>	2,101	35.6	59.0	110%	64.9	-5%	61.7	0%	0.18	5.10%	1,209	75%	2,116	0.0%	2,276	35.1	8%	4%
<i>ex. Auto & Broadline (Internet) Retail</i>	2,416	21.9	110.5	101%	111.3	-5%	105.3	13%	0.78	5.21%	2,021	14%	2,297	1.4%	2,443	22.0	1%	-3%
Consumer Staples	2,614	19.7	132.5	98%	129.7	-5%	123.2	14%	0.84	5.00%	2,464	5%	2,587	2.7%	2,712	20.9	4%	0%
Energy	1,744	14.5	120.5	100%	120.5	-10%	108.5	14%	0.90	5.75%	1,886	-15%	1,603	3.1%	1,686	14.0	-3%	-7%
Financials	6,965	17.2	405.0	99%	399.9	-7%	370.8		1.11	5.75%	6,449	0%	6,449	1.4%	6,891	17.2	-1%	-5%
<i>Banks</i>	1,815	13.3	136.5	100%	136.5	-7%	126.9		1.11	6.00%	2,116	-10%	1,904	2.5%	2,019	14.8	11%	7%
Health Care	5,189	17.1	303.0	98%	297.8	-8%	274.0	10%	1.14	5.20%	5,269	13%	5,928	1.8%	6,280	21.1	21%	17%
Industrials	4,029	21.1	190.5	103%	195.9	-5%	186.1	15%	0.88	5.25%	3,544	10%	3,899	1.4%	4,146	21.2	3%	-1%
Information Technology	16,392	29.3	560.0	103%	578.3	-2%	566.7	2%	0.95	5.10%	11,111	40%	15,556	0.6%	16,645	28.8	2%	-2%
Materials	1,088	21.1	51.5	98%	50.5	-7%	46.9	16%	0.90	5.50%	853	10%	938	1.8%	997	19.8	-8%	-12%
Real Estate	997	17.8	56.0	100%	56.1	-10%	50.5	35%	1.79	5.25%	961	5%	1,009	3.6%	1,051	18.7	5%	1%
Utilities	1,139	16.6	68.5	111%	76.1	-7%	70.8	79%	-0.81	5.25%	1,348	0%	1,348	3.0%	1,412	18.5	24%	20%
S&P 500 (\$ bn)	51,177	21.9	2332.5	101%	2359.2	-5.6%	2227.1			5.26%	42,201	18.5%	49990	1.2%	53,233	22.6	4%	0%
S&P 500 Index (\$/sh)	6051	22.0	275.0	102%	280.0	-5.4%	265.0	10%	0.93	5.25%	5048	18.5%	5982	1.2%	6361	22.7	5%	0%

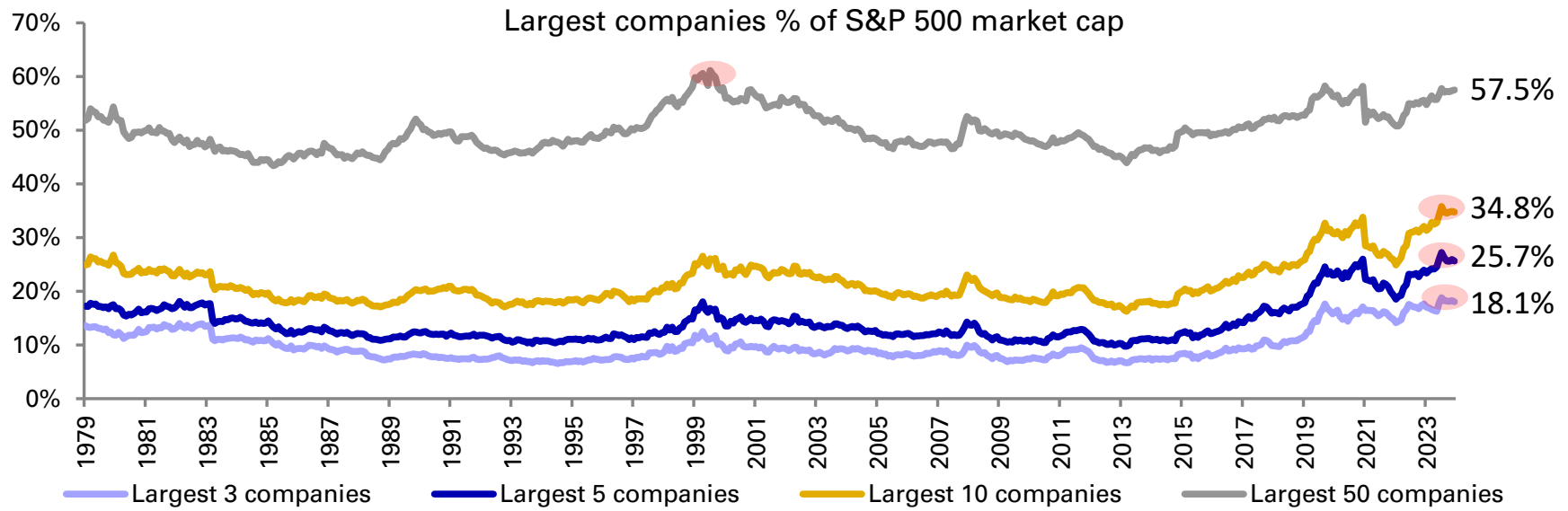
>5%	Bigger upside vs. S&P 500
between -5% and 5%	Same upside as S&P 500
<-5%	Smaller upside vs. S&P 500

Source: IBES, DWS Investment GmbH as of 12/17/2024. 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. 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 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 9/30/2024.

The estimated 2025 year end upside is on absolute valuation basis of each sector, not on relative sector valuation basis.

S&P 500 concentration



Source: Clarifi, DWS Investment GmbH as of 11/30/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

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	
Over-weight	9.9%	14.7%	Health Care	16.8	21.0	19.1	Biotechnology Health Care Equipment & Supplies Pharmaceuticals	13.2 28.3 14.6	18.2 28.2 24.5	20.4 26.2 17.3	Health Care Providers & Services	15.2	14.2	14.3	Life Sciences Tools & Services	23.0	26.0	27.3	
	13.3%	16.1%	Financials	22.7	20.4	18.5	Banks Insurance	16.0 22.7	13.5 18.6	14.0 15.2	Capital Markets Financial Services	25.3 33.7	26.1 29.8	21.4 26.3	Consumer Finance	16.5	18.8	16.4	
	2.3%	3.4%	Utilities	23.0	21.1	18.5	Electric Utilities	22.3	20.1	17.8	Gas Utilities Independent Power & Renewable E Multi-Utilities Water Utilities	24.7 -353.4 19.5 29.2	22.3 55.1 20.4 26.1	20.1 22.0 19.2 23.5					
	9.5%	10.6%	Communication Services	35.2	27.7	23.5	Entertainment Interactive Media & Services	112.0 50.9	44.7 36.0	70.1 26.0	Diversified Telecommunication Ser Wireless Telecommunication Serv	8.3 107.1	9.0 30.4	9.8 24.098	Media	11.5	11.2	10.8	
	3.1%	4.0%	Energy	8.9	11.7	15.9	Energy Equipment & Services	20.3	13.7	12.0	Oil Gas & Consumable Fuels	8.6	11.6	16.2					
Equal-weight	8.2%	8.1%	Industrials	30.0	25.3	24.6	Aerospace & Defense Electrical Equipment	42.2 33.9	38.6 33.8	37.5 26.0	Air Freight & Logistics Construction & Engineering Industrial Conglomerates Machinery Passenger Airlines	12.0 53.1 19.8 25.1 25.1	16.9 48.9 15.9 19.8 8.4	16.9 40.8 21.7 20.1 11.0	Building Products Commercial Services & Supplies Ground Transportation Professional Services Trading Companies & Distributors	25.5 40.6 57.8 36.3 31.5	31.4 36.1 28.2 31.8 26.3	24.3 33.3 23.5 29.0 25.0	
	5.6%	5.3%	Consumer Staples	23.3	22.2	20.6	Beverages	24.2	21.8	20.5	Consumer Staples Distribution & R Household Products Personal Care Products	30.7 29.7 48.0	29.6 27.4 21.5	24.1 25.0 24.1	Tobacco Food Products	16.3 13.7	16.0 14.5	15.4 15.2	
	1.9%	1.4%	Materials	16.9	21.9	23.7					Chemicals Construction Materials Metals & Mining	17.2 49.0 8.7	21.6 33.3 13.1	23.8 35.0 16.6	Containers & Packaging	26.8	36.9	28.5	
	2.1%	1.3%	Real Estate	19.7	19.4	18.6					Hotel & Resort REITs Industrial REITs Office REITs Retail REITs Specialized REITs	10.5 21.1 10.7 15.0 20.2	9.9 19.8 5.1 14.4 20.2	9.5 17.4 11.7 13.9 20.2	Health Care REITs Residential REITs Real Estate Mgmt. & Development	22.4 20.2 31.2	28.4 18.8 42.8	18.0 18.6 40.4	
	32.4%	28.3%	Information Technology	43.7	43.3	35.3	Software IT Services	49.7 28.6	43.0 26.4	36.6 25.2	Technology Hardware Storage & P	38.4	42.3	35.3	Communications Equipment Electronic Equipment Semiconductors	19.8 22.3 53.2	18.0 29.8 54.8	18.0 25.3 38.9	
Under-weight	11.6%	6.7%	Consumer Discretionary	53.6	37.7	33.3	Automobile Components	12	10.6	9.0	Broadline Retail Distributors Household Durables Leisure Products Textiles Apparel & Luxury Goods	-10562 13.8 12.3 13.5 25.6	73.7 14.2 12.3 20.9 28.4	42.0 16.5 12.8 15.6 24.4	Automobiles Hotels Restaurants & Leisure Specialty Retail	49 69.1 25.0	52.3 26.1 26.3	53.3 26.8 26.3	
	Automobiles		48.9	52.3	53.3														
	Broadline Retail		-10562	73.7	42.0														
	CD ex Auto & Broadline Retail		29.5	23.6	23.7														
Aggregate PE: DWS View							Overweight	28.2	27.0	23.7	Equalweight	21.3	22.2	22.2	Underweight	38.8	35.2	30.1	
	S&P 500							6051				2022, 2023& 2024 EPS	217.69	223.00	245.00	2022, 2023 & 2024 PE	27.8	27.1	24.7
												Bottom-up Consensus EPS	217.69	221.46	243.11	Bottom-up Cons. PE	27.8	27.3	24.9
																2022, 2023 & 2024 Ex Energy PE	28.4	28.4	25.2
																Btm-up Cons. Ex Energy PE	29.8	28.2	25.5

Sector OW	10.71%
Sector UW	-10.71%
Industry OW	18.07%
Industry UW	-18.07%
Beta	0.90
Tracking Error	275bp

Macro tilts:	
Cyclicals	-4.67%
Defensive	4.63%
Value (Financial+Energy)	3.88%
Growth	1.96%
Growth ex Health Care	-2.81%
Consumer	-4.67%
Services/experience	-0.84%
Disc. Goods	-3.43%
Retailing	-1.36%
Durables	-2.07%
Staples Goods/Retail	-0.40%
Commodity	0.79%
Energy	1.02%
Metals/Chemicals	-0.23%
Capex	6.25%
Capacity additions	2.75%
Productivity	3.50%
Health Care	4.77%
Innovation	3.89%
Marketers	1.86%
Insurers	-0.19%
Financials	2.86%
Up rates/low spreads	0.97%
Capital Markets	-0.25%
Insurance	2.14%
Bond Substitutes	0.01%
Weak FX \$ plays	-0.22%
High R&D plays	2.73%
Transports	-0.68%
Geopolitical risk	1.28%
Weak oil prices	-0.66%
Inflation shock	-0.08%
Stagflation Protection	4.26%
Domestic GDP	-3.18%
Global GDP	-5.87%
Consumer TMT	-0.76%
Trade sensitive	-3.26%

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

Price as of 12/17/2024.

Source: DWS Investment Management GmbH. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

U.S. Economy

The U.S. is holding up better than many anticipated

Why the U.S. was so resilient

#1 High fiscal spending

Growth “made in Washington”
High portion of GDP from fiscal spending



#2 High personal savings

High savings was a boost to consumption
However, high savings are now depleted



#3 Resilient labor markets

Tight labor markets led to rising wages
This was also positive for consumption



Economic outlook

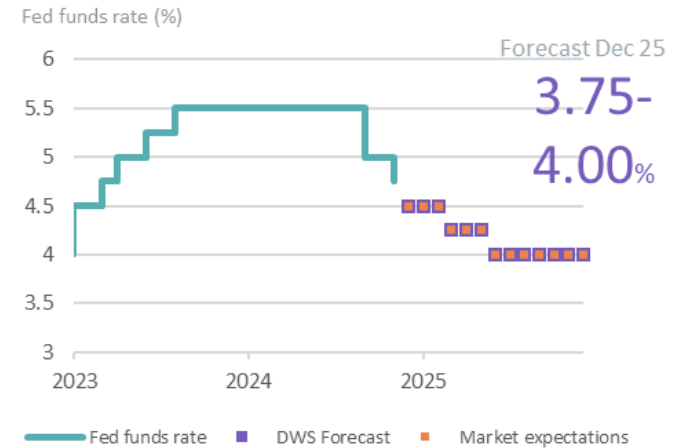
	2024	2025
GDP growth forecast	2.7%	2.0%

- **U.S.:** Robust growth ahead, with some mild deacceleration, extended TCJA supports
- Recession scenario not in the base case, while migration remains a wildcard

	2024	2025
Inflation forecast	2.9%	2.4%

- Disinflationary process is well underway – **last mile towards the 2% target is the hard part**
- High **volatility of incoming inflation data expected** in the next months

Fed

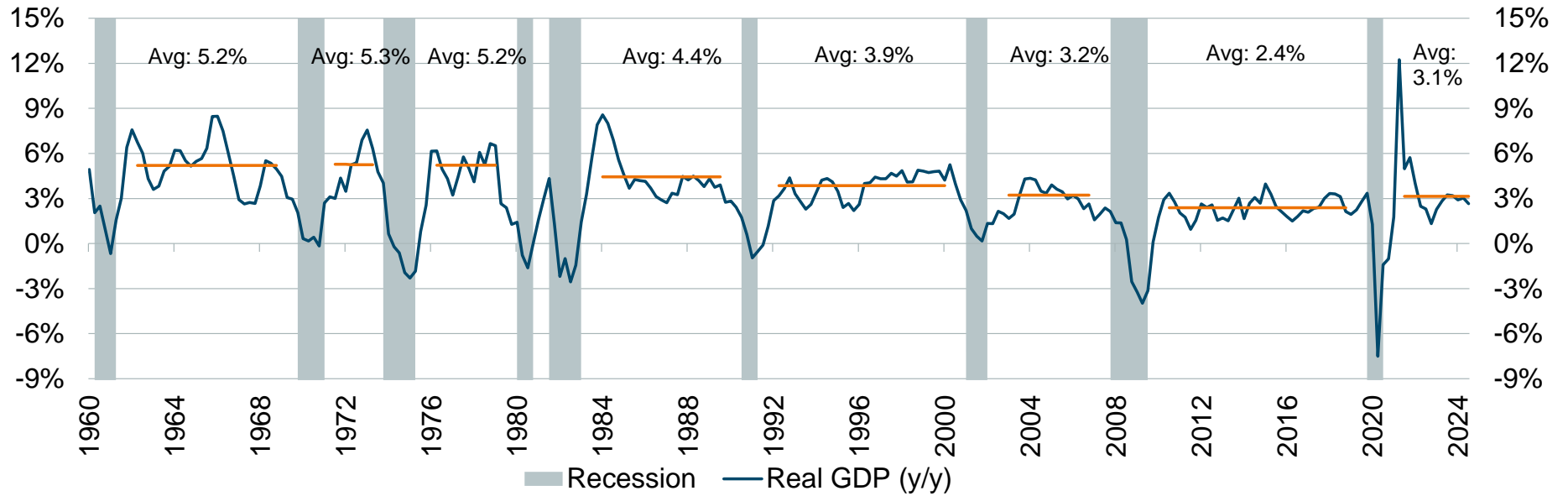


- We expect the FED to **cut 3 times** over our investment horizon by December 2025
- Somewhat higher inflation pressure under a Trump administration could lead to less cuts

Fed policy seems to finally work, inflation nearing 2% while a recession should be avoided

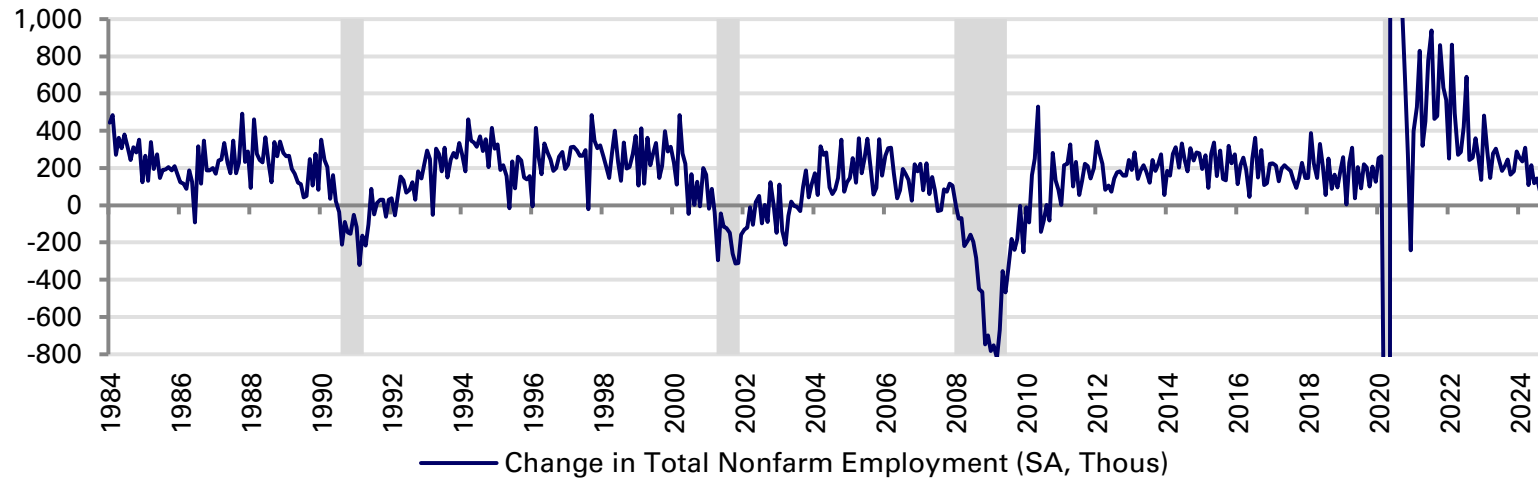
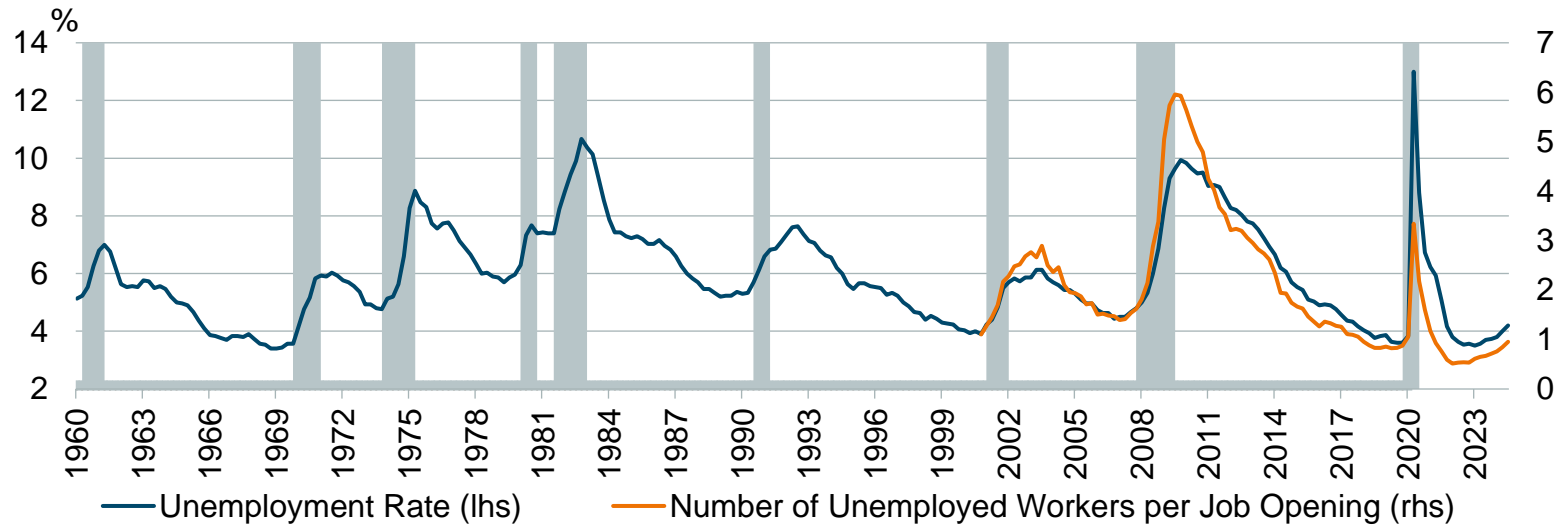
Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect
Source: Bloomberg Finance L.P., DWS Investment GmbH; as of: Nov 2024

U.S. GDP Growth



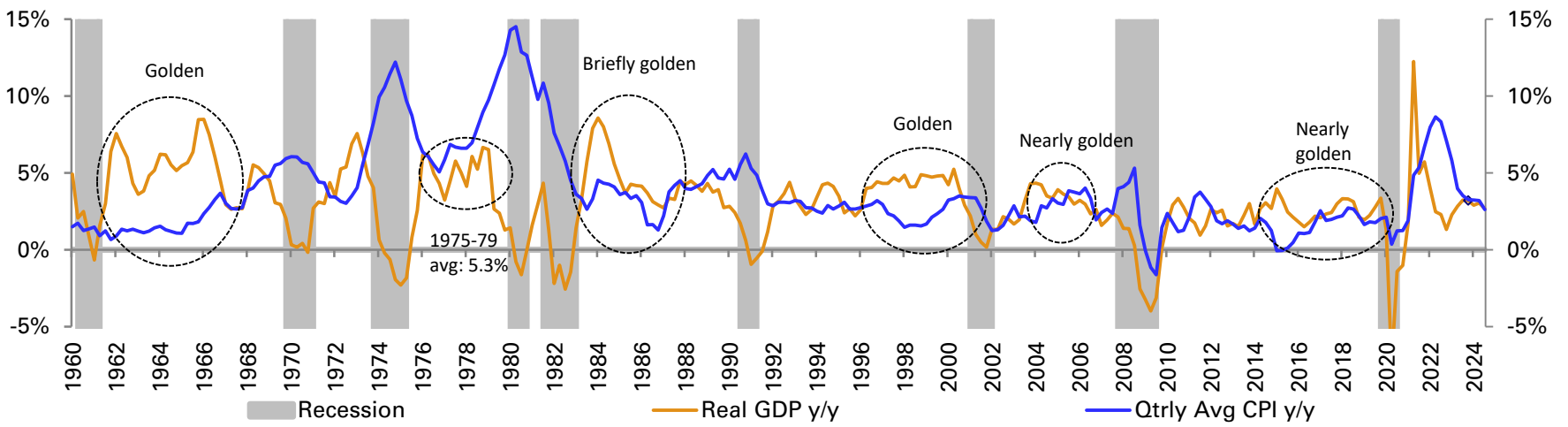
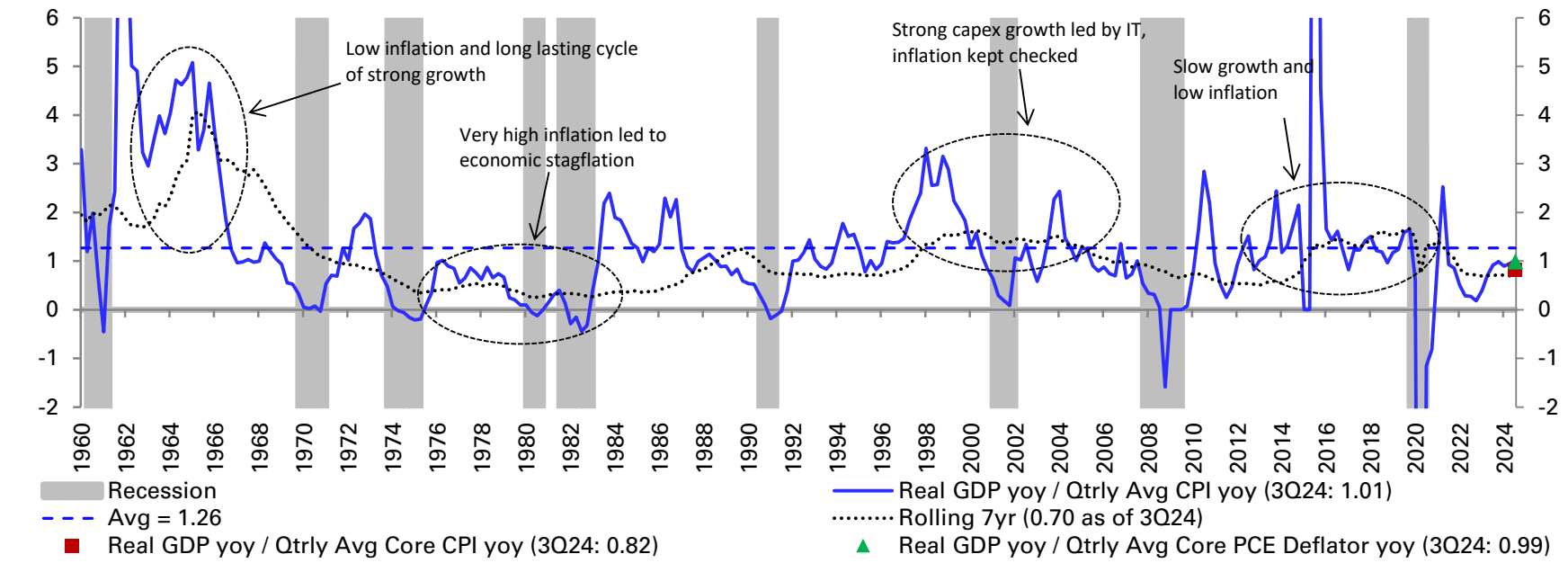
Source: Haver, DWS Investment GmbH as of 3Q2024. Past performance may not be indicative of future results.

U.S. Labor Market



Source: Haver, DWS Investment GmbH as of December 2024. Past performance may not be indicative of future results.

S&P 500 Golden Ratio: Real GDP / CPI



Source: Haver, DWS Investment GmbH as of 3Q2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

Artificial Intelligence: A new source of growth? How to play?

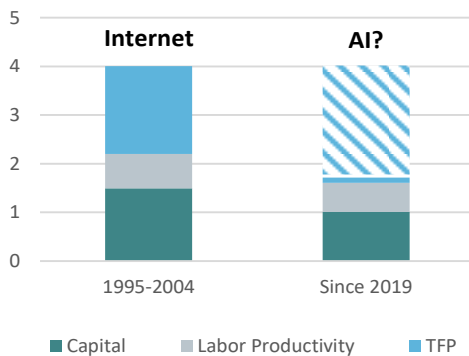
The lifecycle of new innovations

#4 Artificial Intelligence: A new source of growth? How to play?

The lifecycle of new innovations

Economic perspective

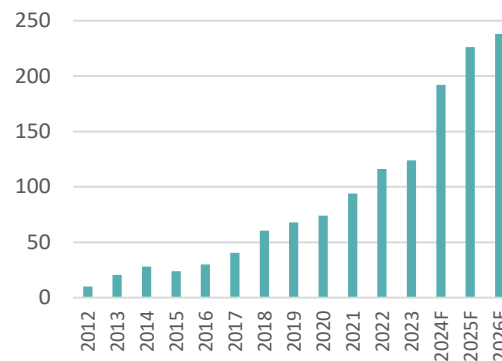
Contribution to U.S. GDP (%)



- **Total factor productivity**² as proxy for innovation
- TFP spiked after WWII & introduction of internet
- AI might bring the **next GDP boost** (innovation)

R&D surge unleashed

Annual capex in billion USD of selected companies¹



- **Massive investments** within the AI-space
- Research for innovations is happening **now**
- But winners might **not** even be **founded** yet

Outlook

1st Focus lies on enablers

In the early days of new innovations, winners are often enablers of the respective technology



2nd Reality check

First wave of optimism wanes, long-term benefits are re-assessed / spending adapts



3rd Long-term beneficiaries

Long-term winners are companies able to implement profitable business models



“The winners of the AI technology might not even be founded yet”

1) Amazon Web Services, Alphabet, Meta, Microsoft, 2) TFP // Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. Source: Bloomberg Finance L.P., DWS Investment GmbH; as of: November 2024.

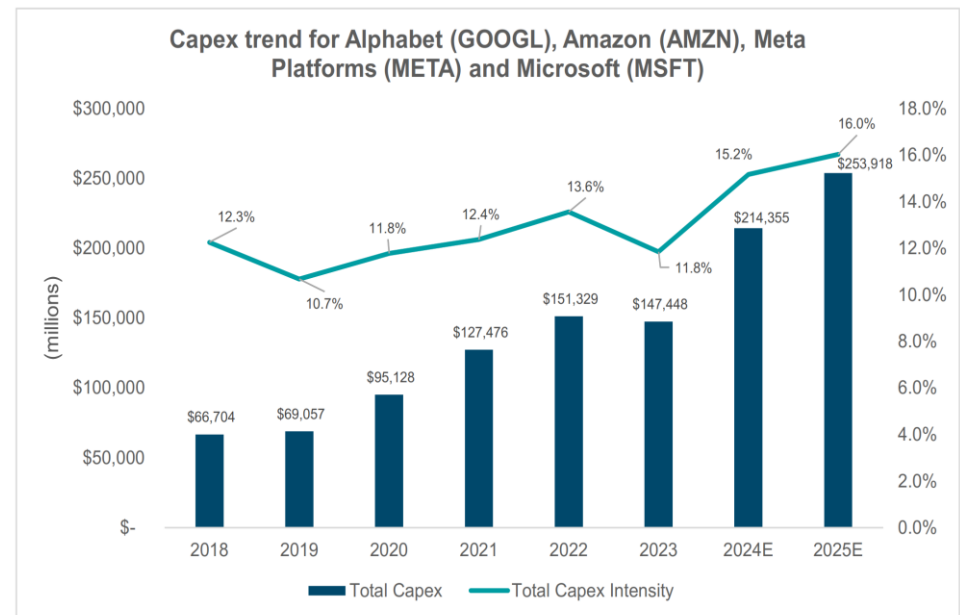
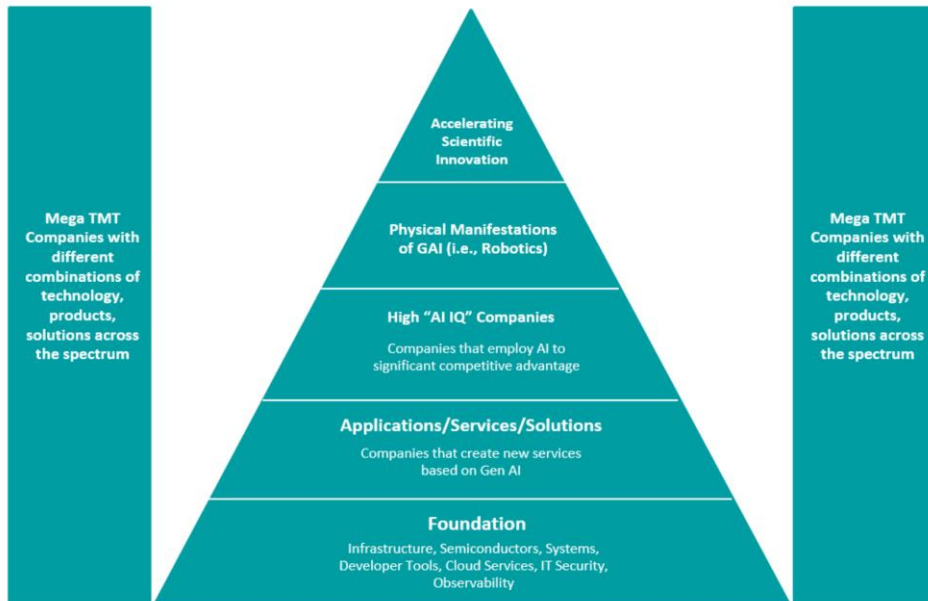
Intelligence Everywhere



Dan Fletcher
Senior Portfolio
Manager, Growth
Equities

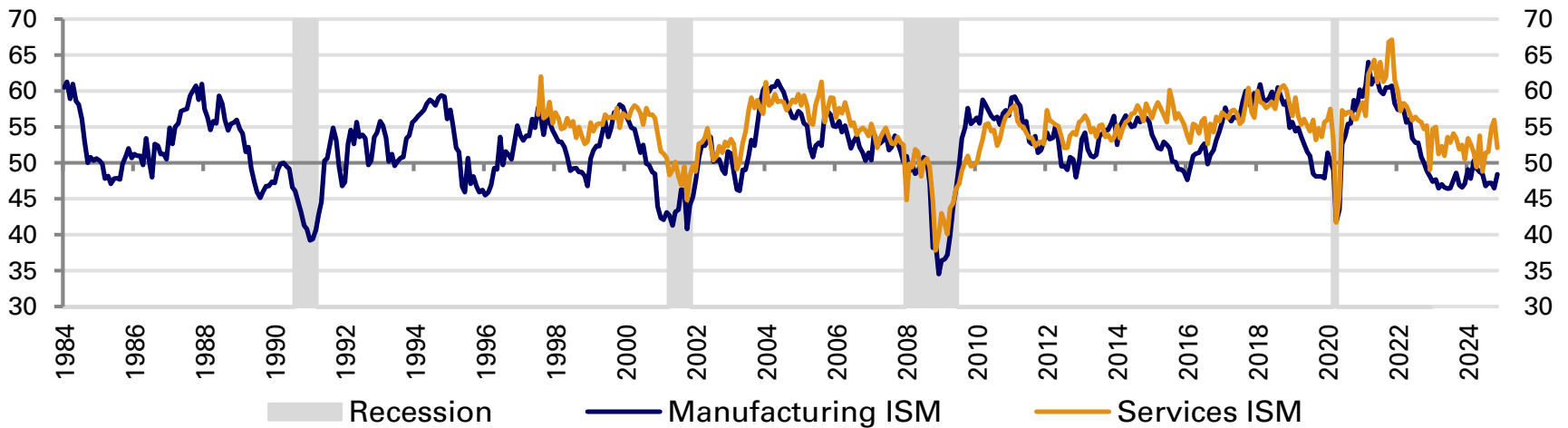
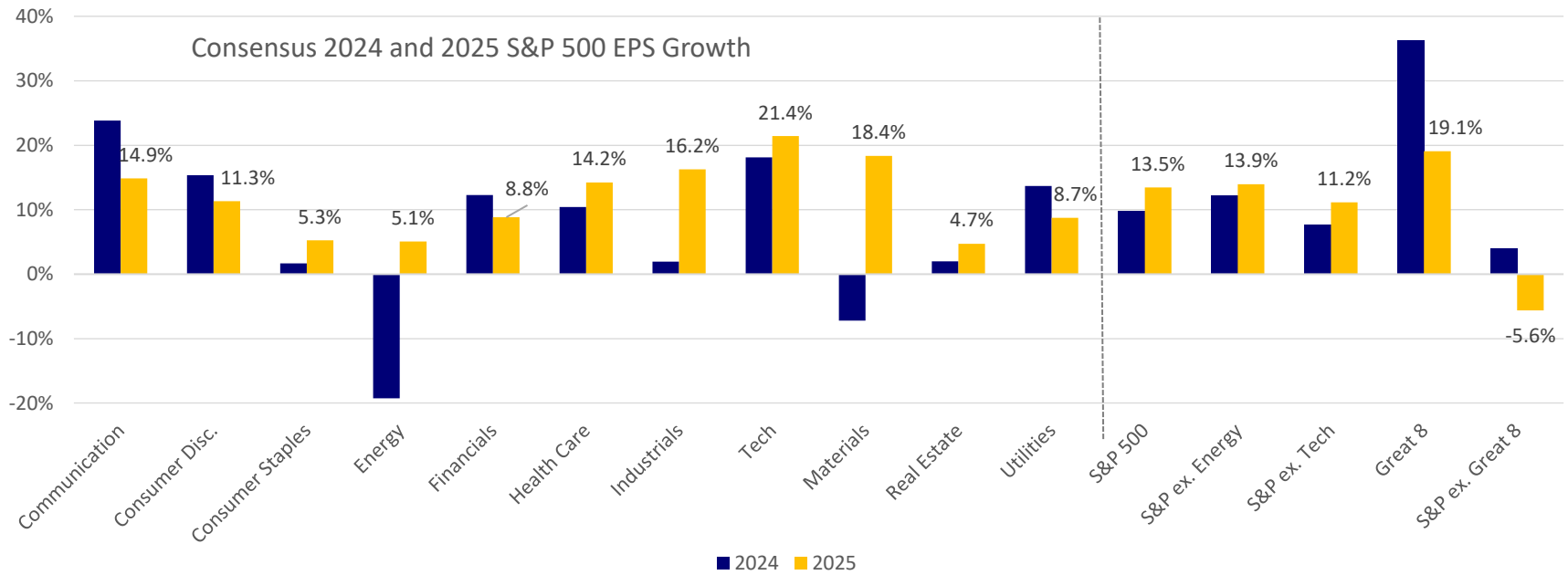
IN A NUTSHELL

- As AI begins to gradually permeate our digital lives, the investment opportunity likely will start to move towards the software and services companies best integrating AI capabilities into their services.
- True “no code” software may offer opportunity but of course disruption potential.
- Gen AI is existential for the big companies, and they are therefore not likely to slow spending near term.
- Investing roadmap/implications



Source: Factset, DWS Investment GmbH as of December 2024. Past performance may not be indicative of future results. 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.

Consensus 2024 and 2025 S&P 500 EPS growth



Source: IBES, Factset, DWS Investment GmbH as of December 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.

S&P 500 EPS model

	2014A	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023A	y/y	2014-2023 CAGR	Bottom-up Consensus (IBES)				DWS View				Normalized 2025		
														2024E	y/y	2025E	y/y	2024E	y/y	2025E	y/y	(\$)	% of 2025
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%	7.2%											
S&P 500 EPS (current constituents)	\$116.65	\$116.91	\$117.56	\$131.11	\$157.84	\$159.30	\$143.13	\$217.76	\$217.69	\$221.46	1.7%	7.4%		\$243	9.8%	\$276	13.4%	\$245	10.6%	\$275	12.2%	\$280	102%
Sector (\$ bn)																							
Communication Services	66.5	76.8	89.0	97.0	121.3	128.1	132.1	183.9	143.8	172.7	20.1%	11.2%	213.9	23.8%	245.4	14.7%	215.0	24.5%	245.0	14.0%	244.8	100%	
Consumer Discretionary	56.8	67.2	74.8	79.0	94.1	92.4	62.7	121.7	111.2	155.4	39.7%	11.8%	179.3	15.4%	199.6	11.3%	178.8	15.1%	200.0	11.9%	209.7	105%	
Consumer Staples	84.3	83.1	85.9	90.2	97.3	98.3	105.7	118.3	112.0	125.5	12.0%	4.5%	127.6	1.7%	134.4	5.3%	127.0	1.2%	132.5	4.3%	129.7	98%	
Energy	94.9	40.0	10.8	37.2	69.3	48.1	-6.6	76.7	195.3	138.5	-29.1%	4.3%	111.6	-19.4%	116.2	4.1%	110.0	-20.6%	120.5	9.5%	120.5	100%	
Financials	183.2	198.8	202.7	211.9	260.9	274.8	224.9	361.0	306.9	332.0	8.2%	6.8%	372.8	12.3%	406.8	9.1%	376.5	13.4%	405.0	7.6%	399.9	99%	
Health Care	137.2	152.1	156.9	171.2	187.8	205.6	226.2	292.0	308.0	243.6	-20.9%	6.6%	269.0	10.4%	307.4	14.3%	272.0	11.7%	303.0	11.4%	297.8	98%	
Industrials	96.2	97.5	94.6	104.3	128.2	111.0	70.4	116.8	134.3	158.5	18.1%	5.7%	161.5	1.9%	187.7	16.2%	163.5	3.1%	190.5	16.5%	195.9	103%	
Information Technology	162.5	168.9	174.2	208.6	243.5	238.4	271.0	446.5	375.3	388.1	3.4%	10.2%	457.6	17.9%	555.6	21.4%	465.0	19.8%	560.0	20.4%	578.3	103%	
Materials	24.5	23.0	22.0	28.7	35.8	33.6	32.0	62.1	64.5	49.6	-23.2%	8.1%	45.9	-7.4%	54.0	17.7%	46.0	-7.2%	51.5	12.0%	50.5	98%	
Real Estate	22.1	23.8	27.7	31.1	34.9	36.4	36.3	43.2	50.6	52.9	4.5%	10.2%	54.0	2.0%	56.4	4.6%	53.5	1.1%	56.0	4.7%	56.1	100%	
Utilities	32.9	33.1	35.7	37.5	40.8	45.8	47.5	48.1	49.5	54.0	9.0%	5.6%	60.6	12.3%	65.9	8.7%	61.5	13.9%	68.5	11.3%	76.1	111%	
S&P 500	961.1	964.4	974.3	1096.7	1313.9	1312.6	1202.3	1870.4	1851.5	1870.9	1.0%	7.7%	2053.8	9.8%	2329.5	13.4%	2068.8	10.6%	2332.5	12.7%	2359.2	101%	
S&P ex. Energy (\$bn)	866.3	924.3	963.5	1059.5	1244.5	1264.5	1208.9	1793.7	1656.2	1732.3	4.6%	8.0%	1942.2	12.1%	2213.3	14.0%	1958.8	13.1%	2212.0	12.9%	2238.7	101%	
S&P ex. Tech (\$bn)	798.6	795.5	800.1	888.1	1070.4	1074.2	931.2	1423.9	1476.2	1482.7	0.4%	7.1%	1596.2	7.7%	1773.9	11.1%	1603.8	8.2%	1772.5	10.5%	1780.9	100%	
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%	5.4%											
S&P 500 Non-GAAP Net Margin	10.2%	10.4%	10.3%	10.7%	12.1%	11.5%	10.3%	13.3%	12.4%	11.8%													

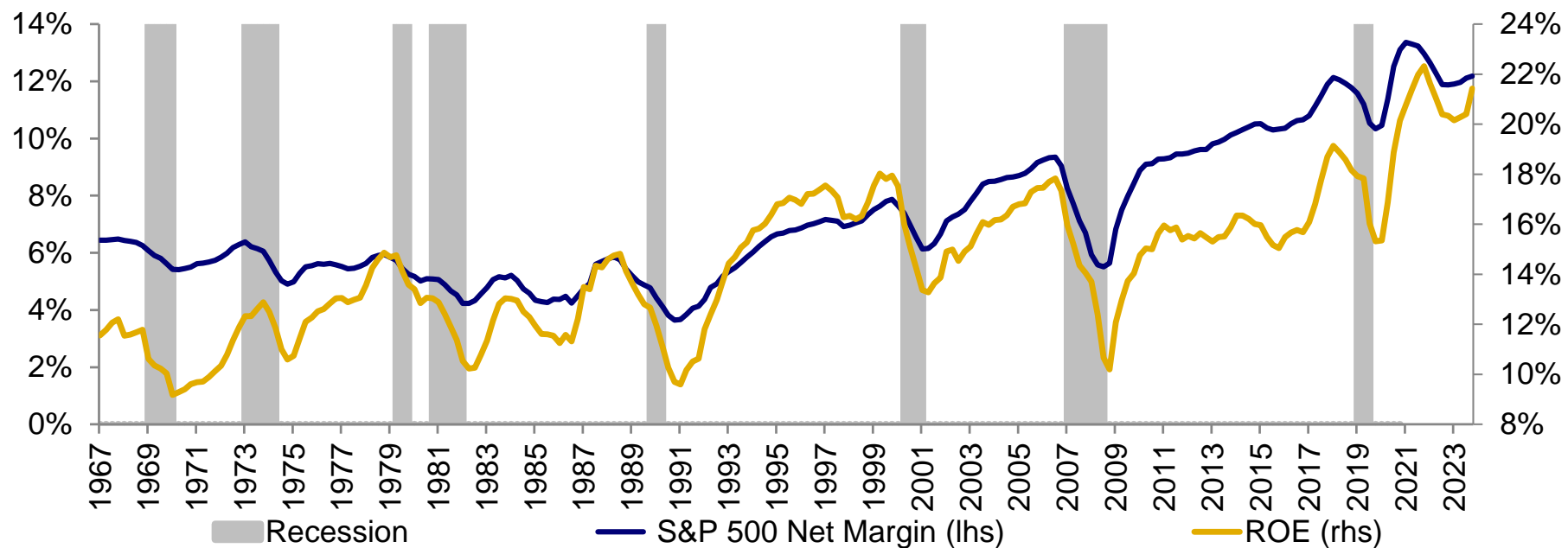
S&P 500 EPS	Whole Year	1Q	2Q	3Q	4Q
2019A	163	39	41	41	42
2020A	140	33	28	38	42
2021A	210	49	53	54	54
2022A	222	55	58	56	53
2023A	223	53.00	54.25	58.5	57.25
2024E	245	58.00	60.00	62.00	65.00

S&P 500 Trailing PE	Average	Stdev	3yr Avg High	3yr Avg Low
1960 – 2023	16.5	4.6	26.3	7.9
1985 – 2023	18.1	3.9	26.3	13.0
1995 – 2023	18.9	3.8	26.3	14.2
2005 – 2023	17.6	2.8	21.8	14.2
2005 – 2019 (pre-pandemic)	16.7	1.9	18.8	14.2

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 9/30/2024.

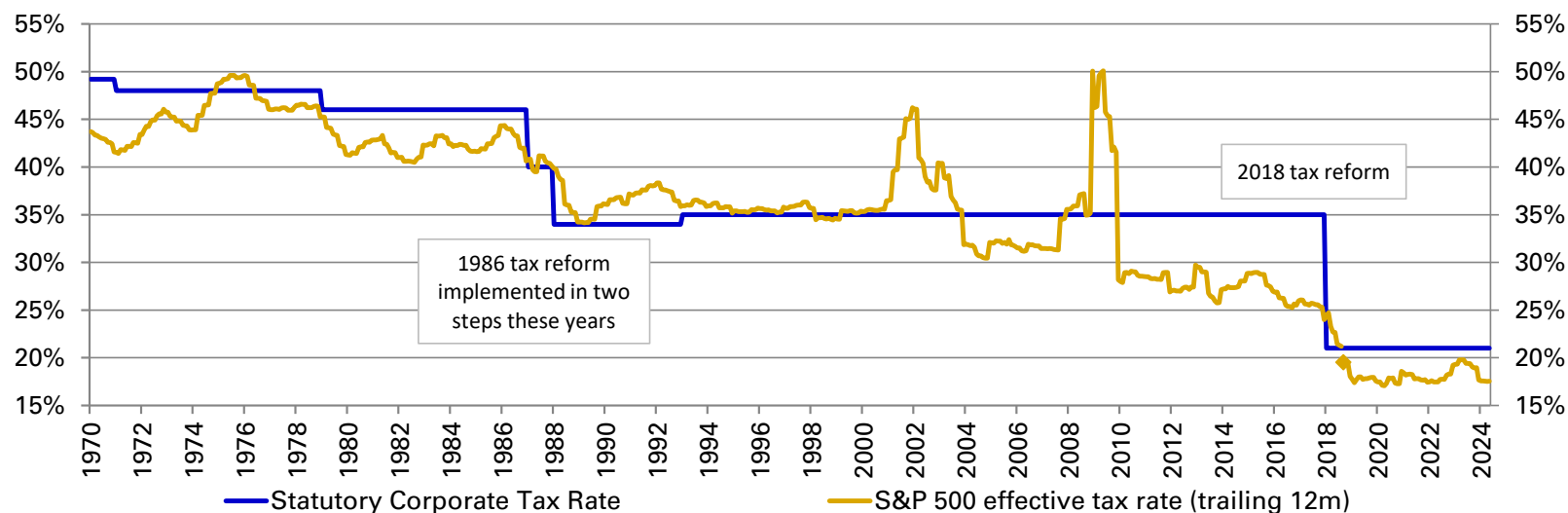
Source: Factset, DWS Investment GmbH as of 12/17/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index. No representation or warranty is made by DWS as to the reasonableness or completeness of the forward-looking statements or to any other financial information contained herein. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

S&P 500 Net Margin and ROE



Source: Factset, Clarifi, DWS Investment GmbH as of 3Q2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 Corporate Tax Rate



	Effective Tax Rate	Current Tax Rate	Cash Paid Tax Rate	US Effective Rate	Foreign Effective Rate	Pretax Domestic Income % of Total	Pretax Foreign Income % of Total	Domestic Pretax Margin	Foreign Pretax Margin
Consumer Discretionary	13.1%	25.3%	25.8%	13.8%	13.8%	66.5%	33.5%	8.5%	12.2%
Consumer Staples	22.8%	23.7%	23.1%	21.8%	28.6%	64.7%	35.3%	4.8%	11.3%
Energy	25.1%	21.3%	23.5%	22.8%	28.1%	50.0%	50.0%	11.2%	23.9%
Financials	17.8%	23.8%	15.9%	28.5%	8.0%	52.2%	47.8%	12.3%	44.5%
Health Care	17.1%	33.1%	37.8%	26.0%	10.2%	29.9%	70.1%	2.1%	33.5%
Industrials	20.2%	22.0%	24.6%	22.2%	17.5%	57.7%	42.3%	8.8%	14.9%
Information Technology	14.0%	22.1%	21.7%	14.1%	15.1%	47.7%	52.3%	27.5%	22.2%
Materials	18.0%	27.3%	25.7%	22.0%	17.8%	46.0%	54.0%	7.4%	11.8%
Communication Services	17.7%	21.9%	19.1%	28.1%	26.5%	88.0%	12.0%	26.3%	6.9%
Real Estate	5.1%	6.4%	6.0%	10.2%	-4.1%	88.0%	12.0%	20.1%	11.2%
Utilities	9.3%	4.2%	4.9%	35.0%	-78.7%	99.3%	1.4%	13.4%	7.7%
S&P 500	17.5%	23.2%	21.8%	23.2%	15.3%	58.1%	41.8%	10.2%	20.4%
S&P 500 ex. Fin.	17.4%	23.1%	23.5%	22.0%	17.7%	59.8%	40.1%		

Source: Clarifi, S&P, DWS Investment GmbH as of December 2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

Corporate tax rate impact on S&P 500 EPS

	Pretax profits (2023)		Current Effective Tax Rate			Boost to EPS				
	US	Foreign	US	Foreign	Overall	10% US Tax	12% US Tax	15% US Tax	18% US Tax	21% US Tax (Current)
Consumer Discretionary	72%	28%	21%	20%	21%	10%	8%	5%	3%	0%
Consumer Staples	57%	43%	21%	20%	21%	8%	6%	4%	2%	0%
Energy	56%	44%	21%	35%	27%	9%	7%	5%	2%	0%
Financials	72%	28%	21%	15%	19%	10%	8%	5%	3%	0%
Health Care	42%	58%	21%	17%	19%	6%	5%	3%	2%	0%
Industrials	63%	37%	21%	17%	20%	9%	7%	5%	2%	0%
Information Technology	48%	52%	21%	15%	18%	6%	5%	3%	2%	0%
Materials	40%	60%	21%	22%	22%	6%	5%	3%	2%	0%
Real Estate	93%	7%	0%	0%	0%	0%	0%	0%	0%	0%
Communication Services	89%	11%	21%	30%	22%	13%	10%	7%	3%	0%
Utilities	99%	1%	10%	25%	10%	12%	10%	7%	3%	0%
S&P 500	65%	35%	21%	18%	20%	9%	7%	5%	2%	0%

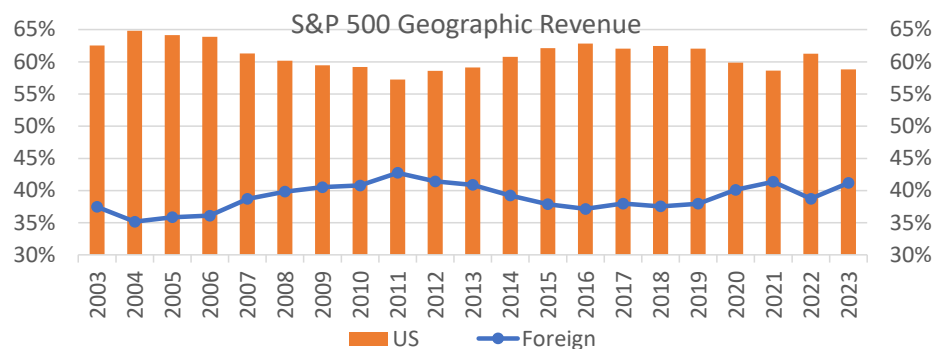
Source: DWS Investment GmbH as of December 2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 revenue geographic distribution

S&P 500 revenue geographic distribution

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
US	62.5%	64.8%	64.1%	63.9%	61.3%	60.2%	59.5%	59.2%	57.2%	58.6%	59.1%	60.8%	62.1%	62.8%	62.0%	62.5%	62.0%	59.9%	58.6%	61.3%	58.8%
Foreign	37.5%	35.2%	35.9%	36.1%	38.7%	39.8%	40.5%	40.8%	42.8%	41.4%	40.9%	39.2%	37.9%	37.2%	38.0%	37.5%	38.0%	40.1%	41.4%	38.7%	41.2%
Europe	16.7%	15.6%	15.6%	15.5%	17.0%	17.7%	16.7%	16.0%	15.9%	15.0%	15.2%	14.6%	13.9%	13.4%	13.6%	13.9%	13.8%	14.5%	14.5%	13.3%	13.8%
UK	2.9%	2.9%	2.7%	2.7%	3.0%	2.9%	2.7%	2.7%	2.8%	2.6%	2.7%	2.6%	2.8%	2.6%	2.3%	2.4%	2.4%	2.5%	2.4%	2.3%	2.3%
Asia	12.3%	11.6%	11.6%	11.1%	11.8%	11.4%	12.9%	13.5%	14.3%	14.1%	13.7%	13.4%	13.6%	14.0%	14.9%	14.8%	15.3%	17.0%	18.3%	16.2%	18.0%
China	2.1%	2.1%	2.2%	2.2%	2.6%	2.8%	3.4%	3.8%	4.5%	4.3%	4.6%	4.7%	5.3%	5.3%	5.8%	5.9%	5.9%	6.8%	7.9%	6.9%	7.5%
Japan	4.8%	4.4%	4.2%	3.6%	3.5%	3.4%	3.9%	4.1%	4.0%	3.7%	3.2%	2.9%	2.6%	2.9%	2.9%	2.8%	2.9%	3.1%	3.1%	2.6%	2.6%
LatAm	3.0%	3.2%	3.4%	3.5%	3.7%	3.9%	4.0%	4.3%	4.8%	4.6%	4.6%	4.2%	3.9%	3.5%	3.6%	3.4%	3.4%	3.1%	3.2%	3.4%	3.7%

S&P 500 revenue geographic distribution



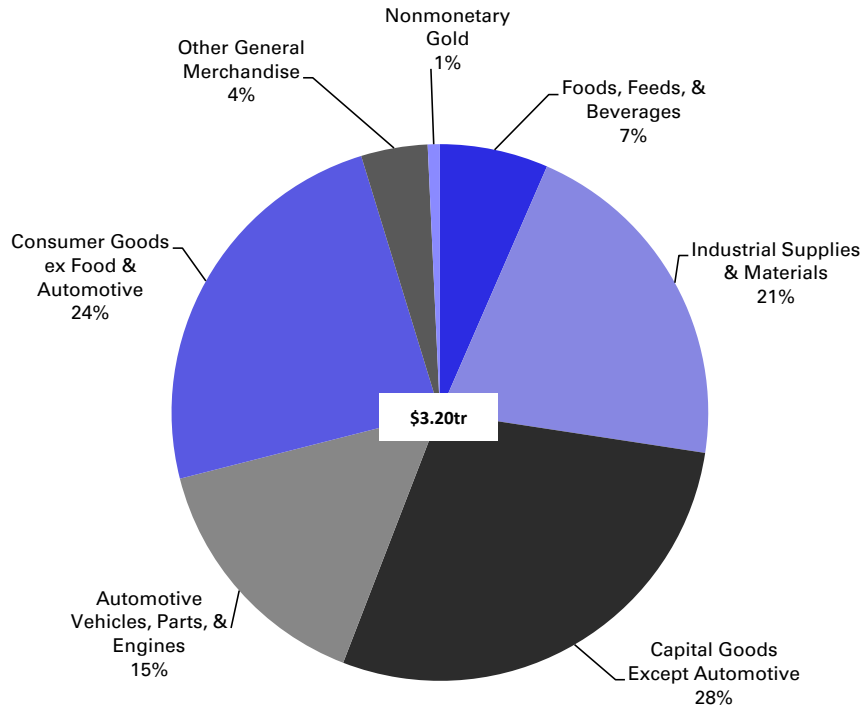
S&P 500 2023 revenue geographic distribution by sector

	US	Foreign	Europe	UK	Asia	China	Japan	LatAm
S&P 500	58.6%	41.4%	13.6%	2.2%	17.9%	7.4%	2.6%	4.0%
Communication	51.9%	48.1%	16.5%	2.1%	14.6%	4.5%	2.3%	8.3%
Cons. Disc.	66.8%	33.2%	14.9%	3.6%	11.9%	5.5%	2.3%	2.1%
Cons. Staples	60.2%	39.8%	13.6%	1.6%	12.3%	4.3%	2.2%	5.2%
Energy	61.0%	39.0%	12.6%	3.9%	14.1%	5.6%	0.8%	4.1%
Financials	71.9%	28.1%	11.1%	2.4%	9.8%	3.0%	1.8%	2.1%
Health Care	65.7%	34.3%	15.7%	1.7%	12.4%	4.5%	2.6%	2.2%
Industrials	66.8%	33.2%	11.2%	2.0%	10.7%	3.3%	1.8%	5.4%
Tech	42.6%	57.4%	14.8%	1.7%	34.1%	14.9%	4.0%	2.0%
Materials	48.1%	51.9%	19.0%	5.1%	20.1%	6.0%	3.0%	6.2%
Real Estate	82.5%	17.5%	6.4%	2.5%	4.5%	1.6%	0.7%	2.6%
Utilities	98.7%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	1.2%

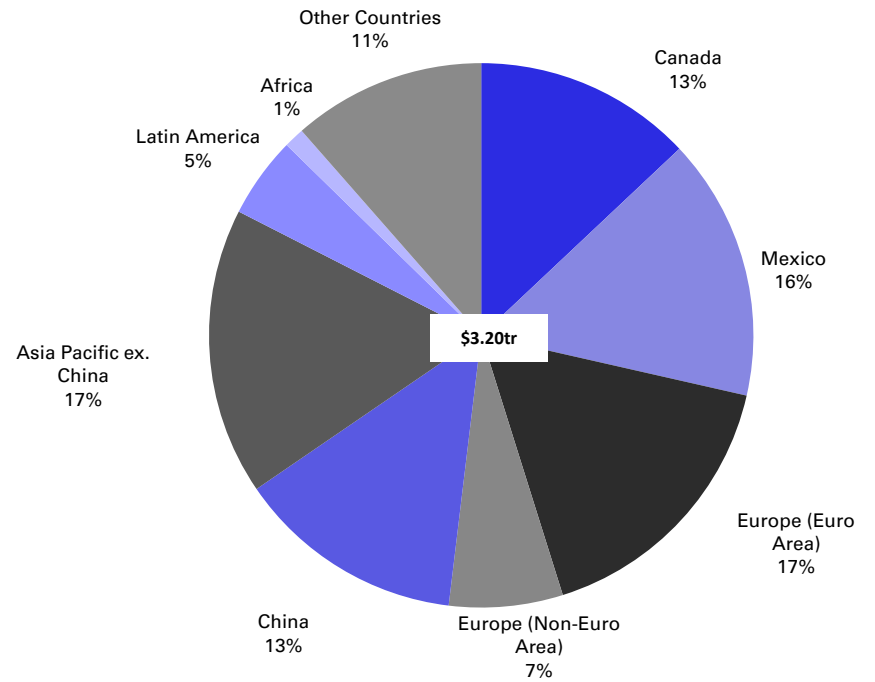
Source: Factset, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance is not a guarantee of future results. It is not possible to invest directly in an index.

U.S imports of goods

U.S. Imports of Goods by category (Trailing 4-quarter 4Q2023-3Q2024)



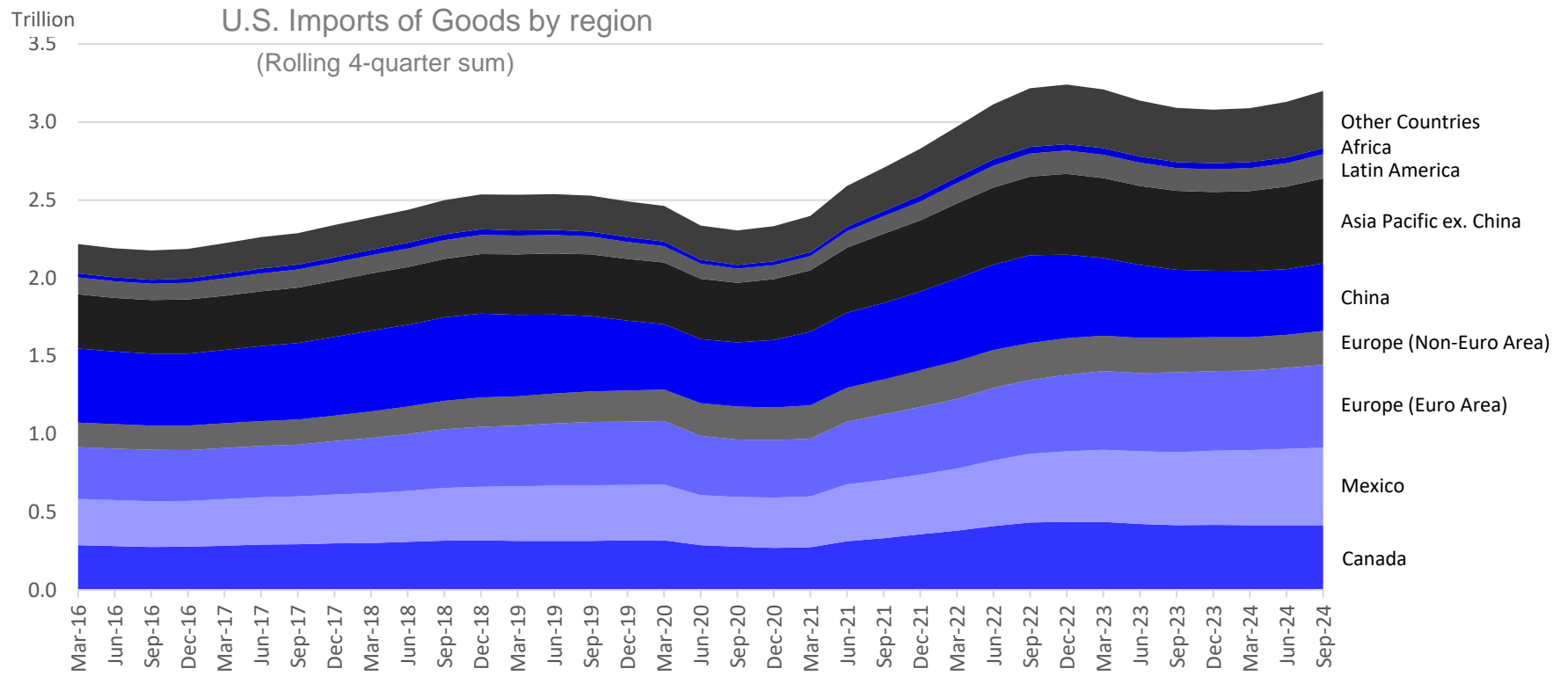
U.S. Imports of Goods by region (Trailing 4-quarter 4Q2023-3Q2024)



Other Countries: India, Israel, Saudi Arabia, Thailand, Vietnam and Other

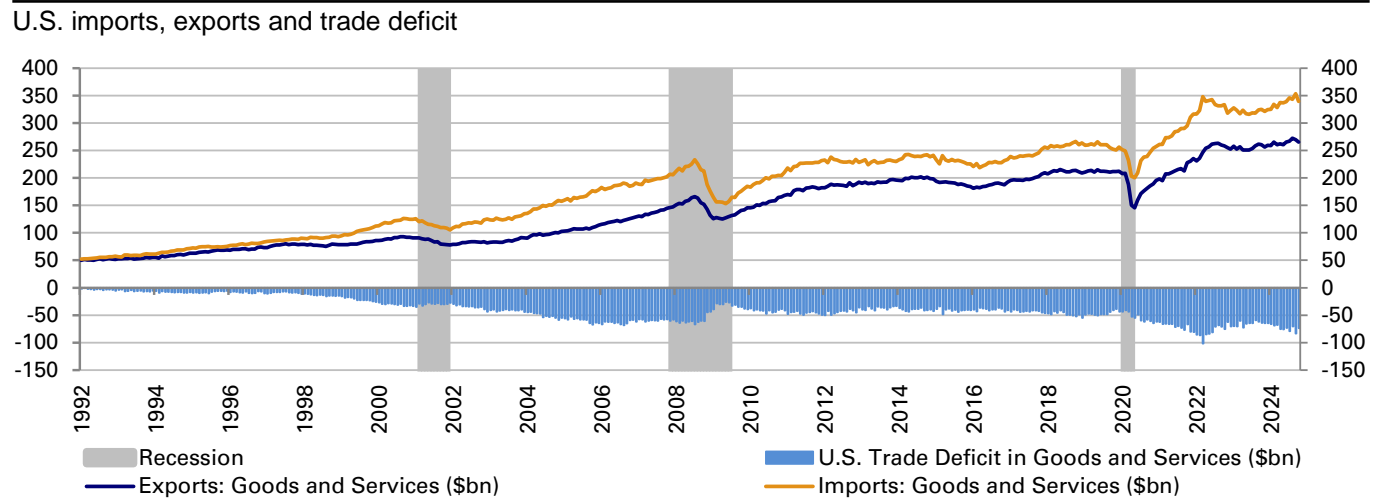
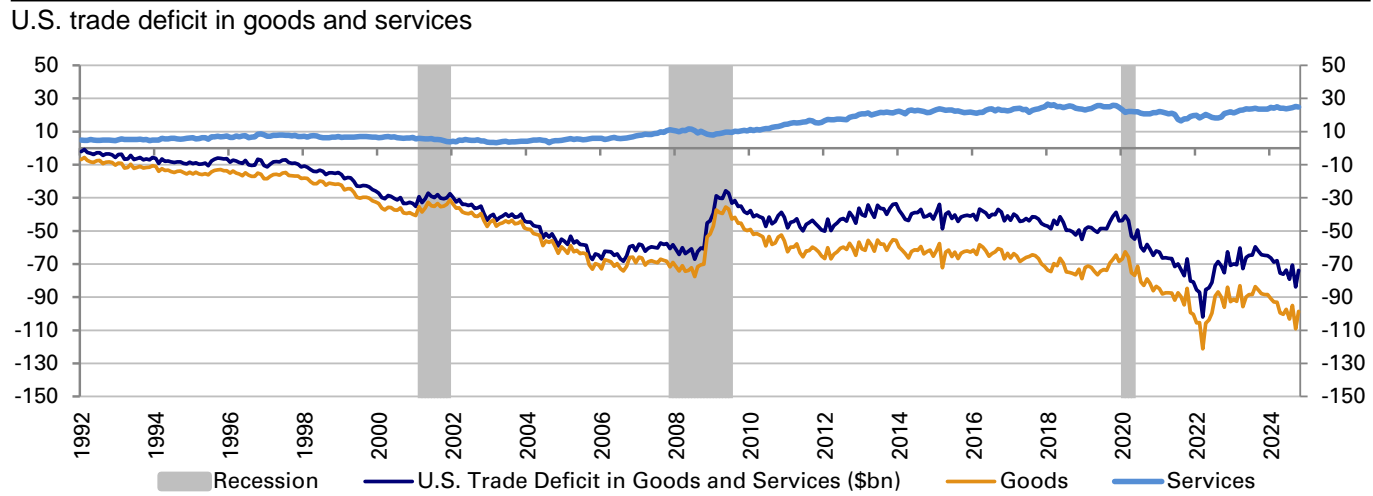
Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only.

U.S imports of goods



Other Countries: India, Israel, Saudi Arabia, Thailand, Vietnam and Other
Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only.

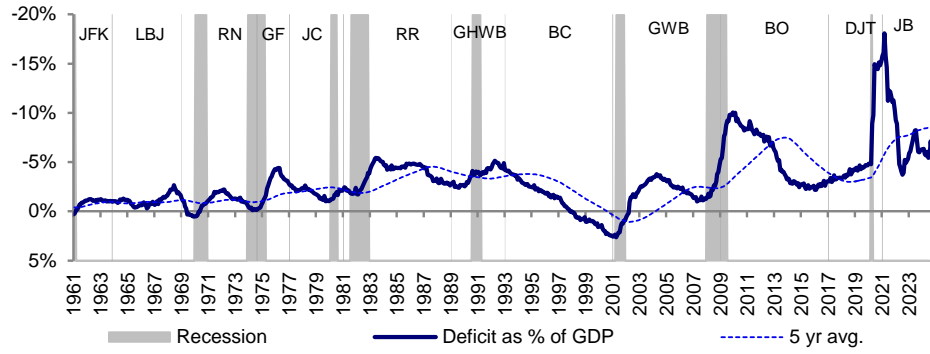
U.S trade deficit



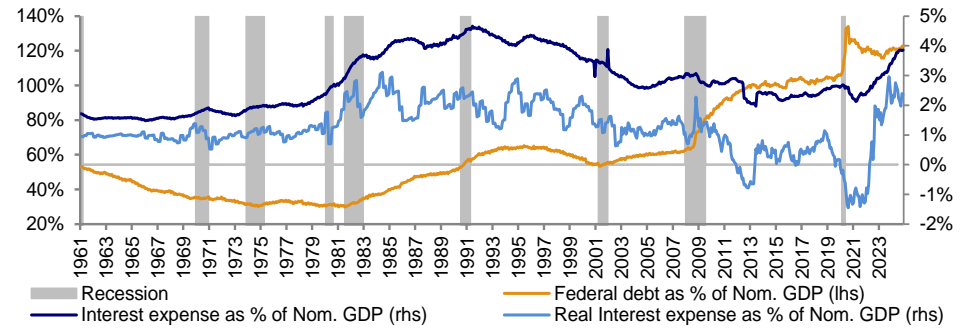
Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only.

U.S. fiscal and fed balance sheet

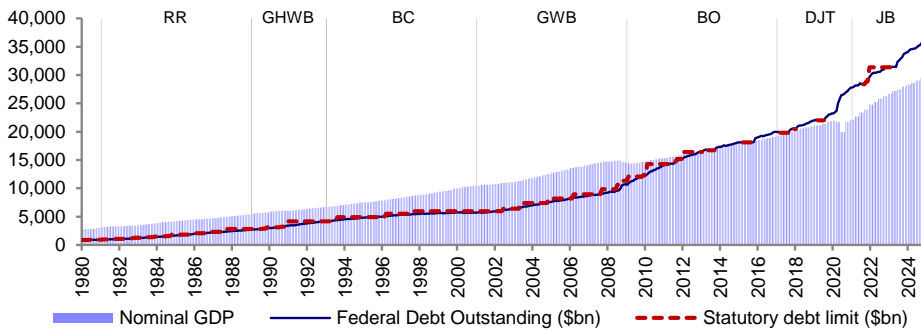
U.S. Government deficit



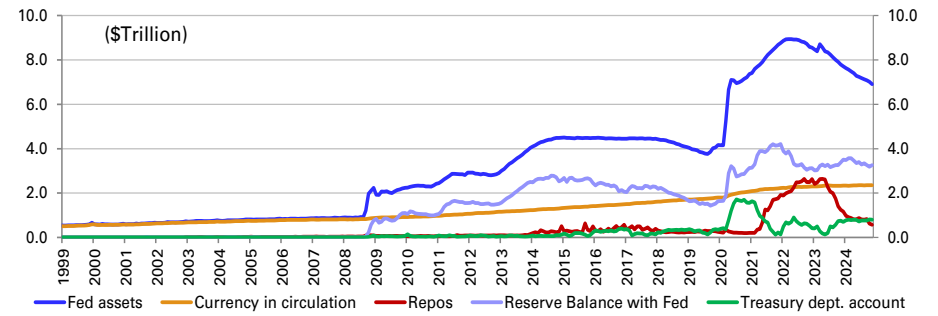
U.S. Federal government debt / GDP, Interest / GDP



Debt ceiling



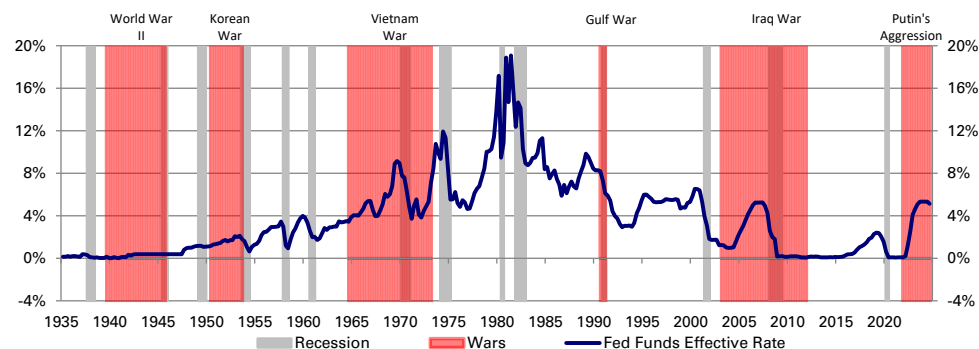
Federal Reserve assets & liabilities



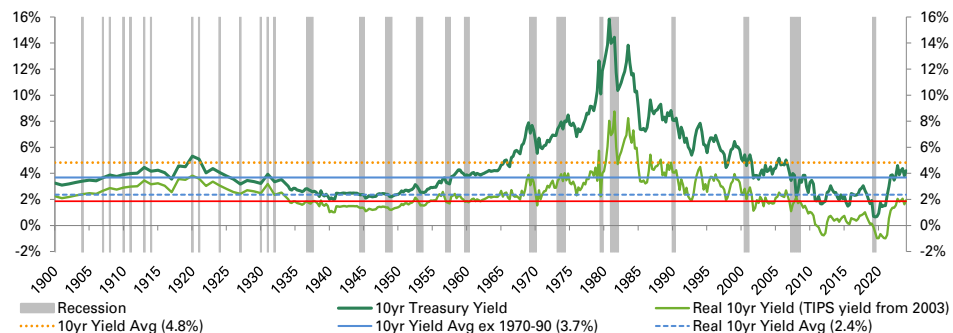
Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only.

Interest rates

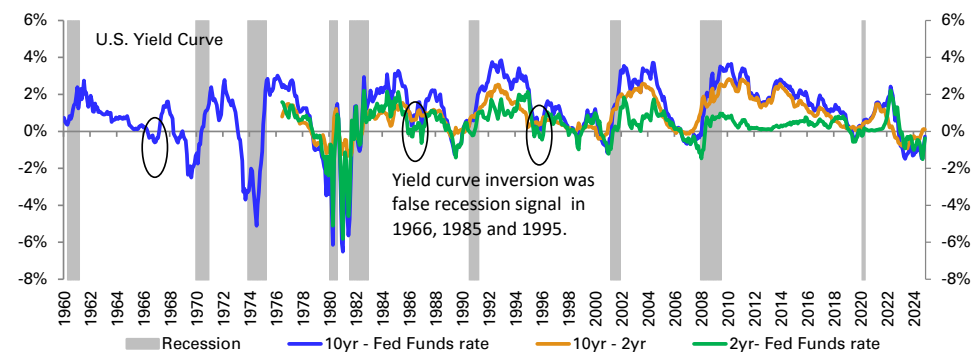
Fed funds rate



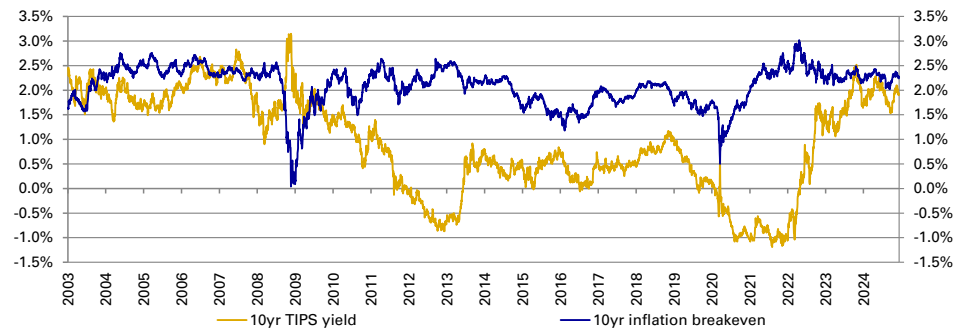
10-year treasury yields



Yield curve

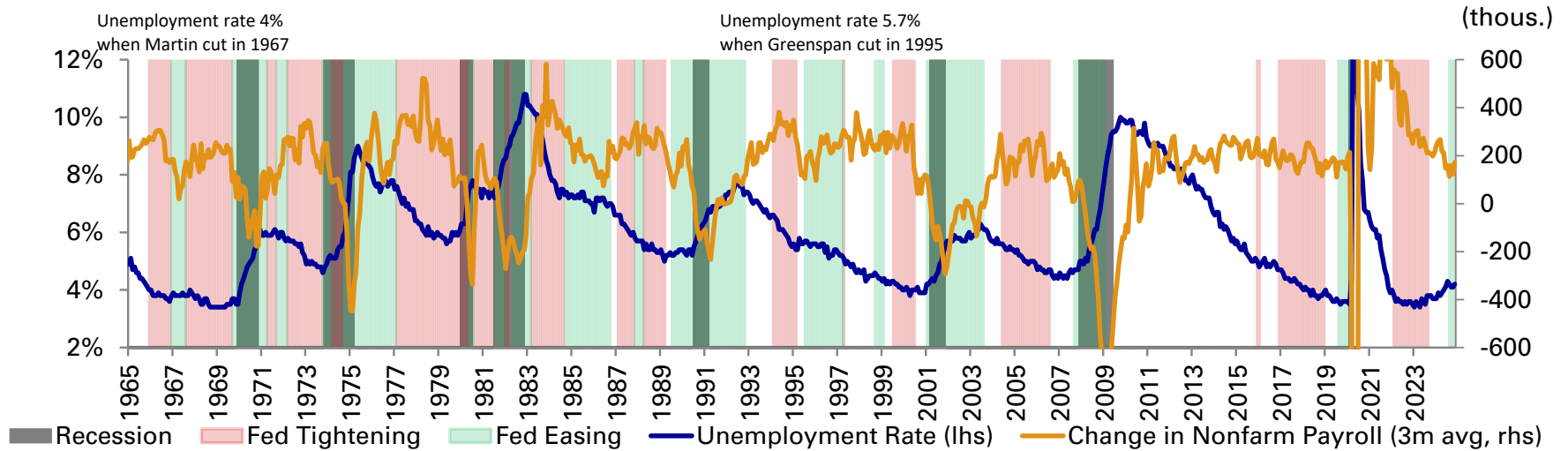
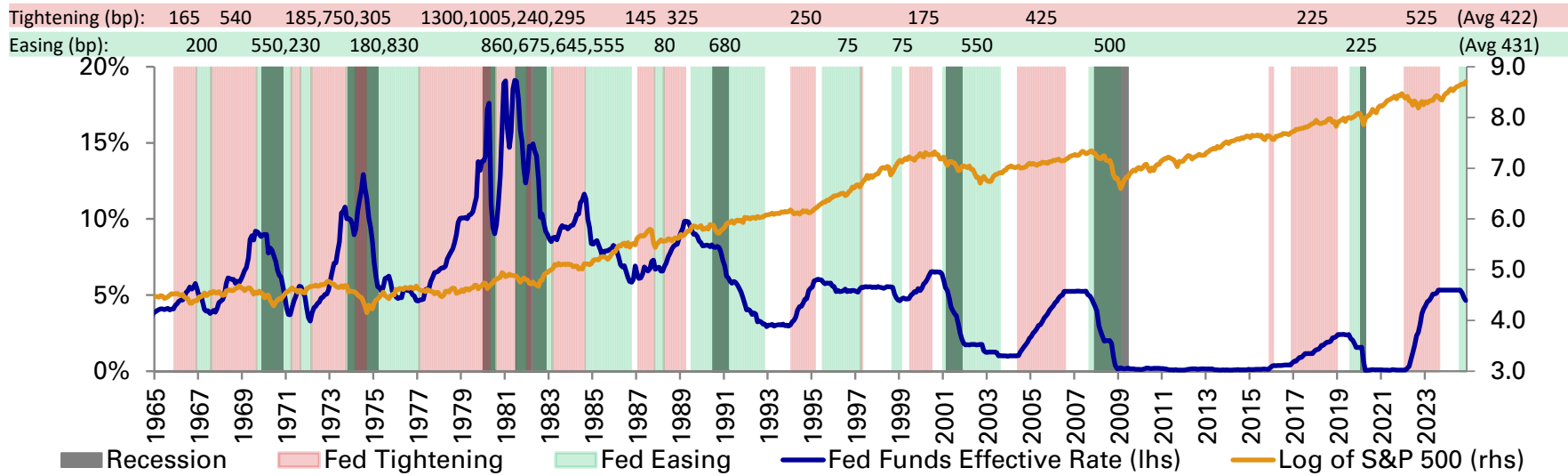


Treasury Inflation-Protected Securities (TIPS) yields and breakevens



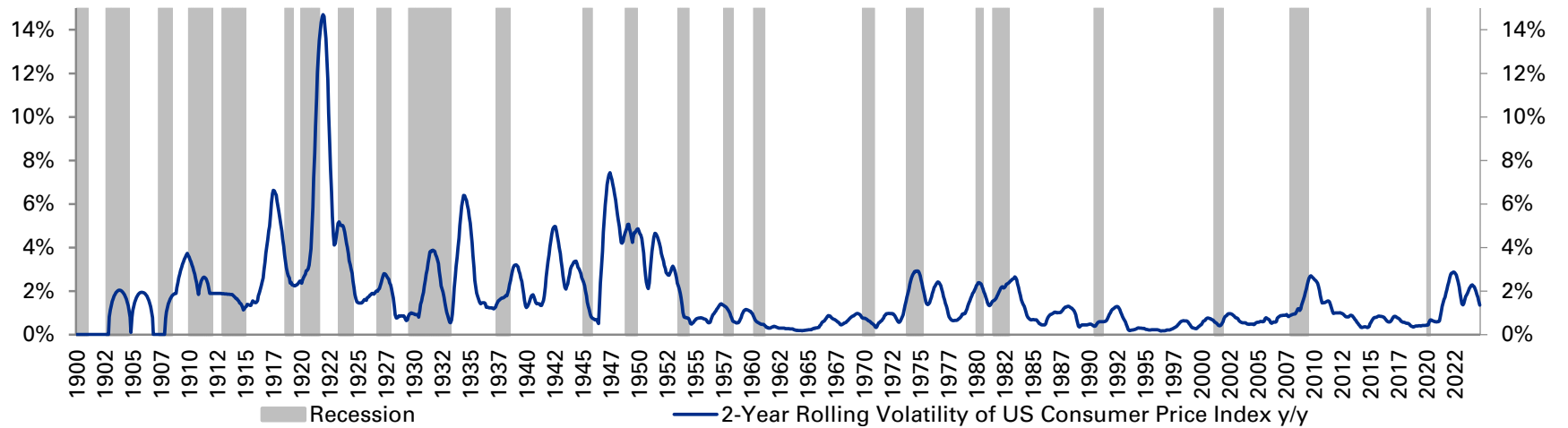
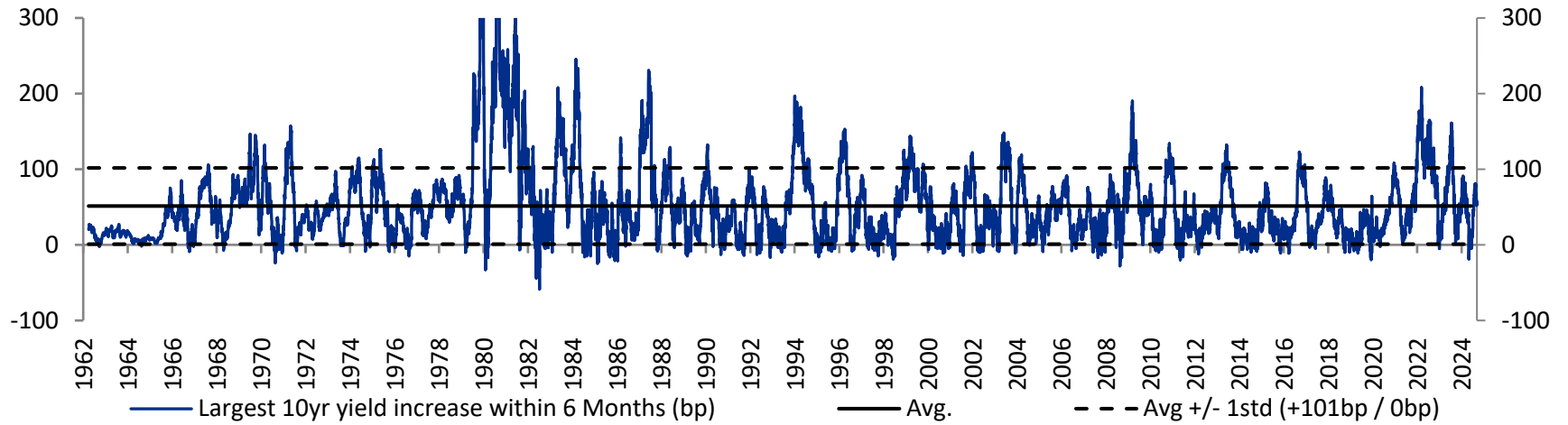
Source: Haver, Factset, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance may not be indicative of future results.

Fed tightening and easing cycles since 1960



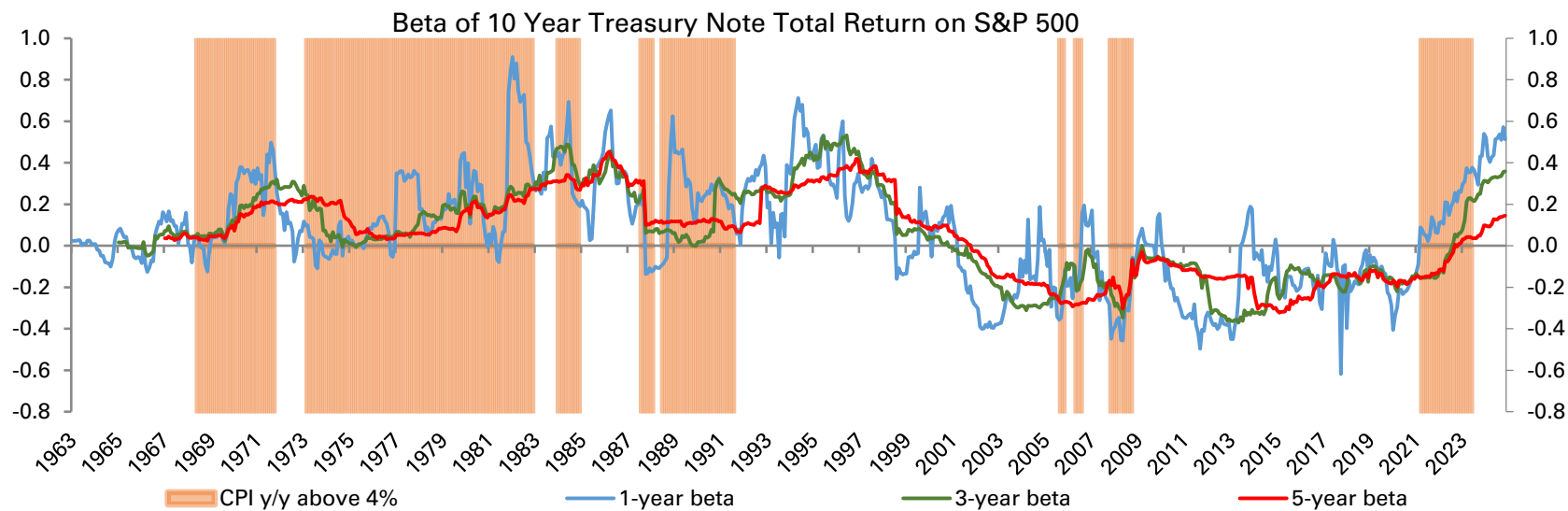
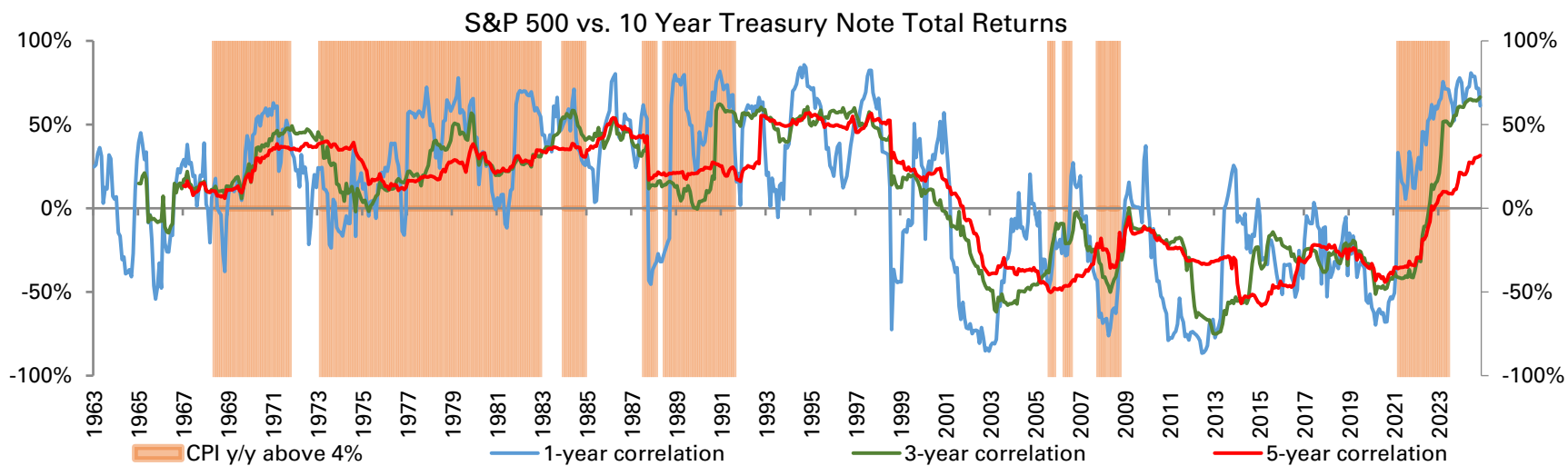
Source: Haver, Factset, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance may not be indicative of future results.

Interest rate and inflation volatility



Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only.

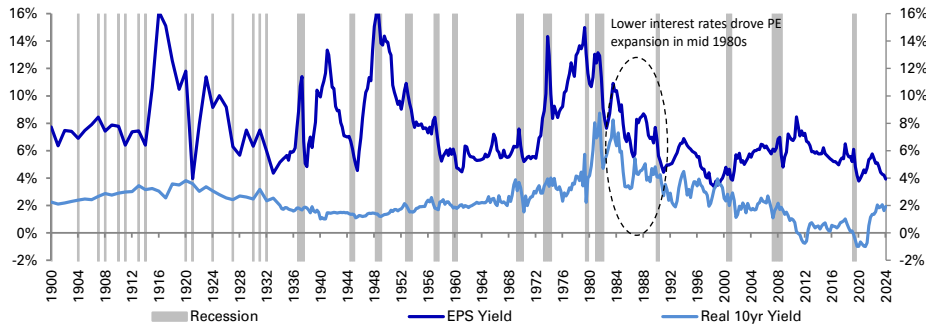
S&P 500 vs. 10Y Treasury Note: Correlation & Beta



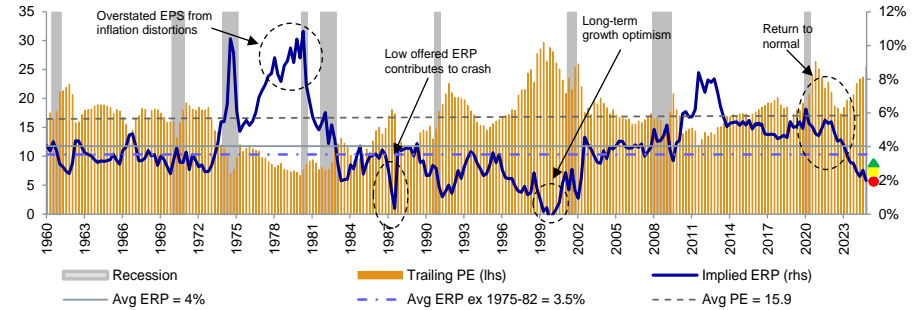
Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance is not a guarantee of future results. It is not possible to invest directly in an index.

Equity

S&P 500 Earnings per share (EPS) yield

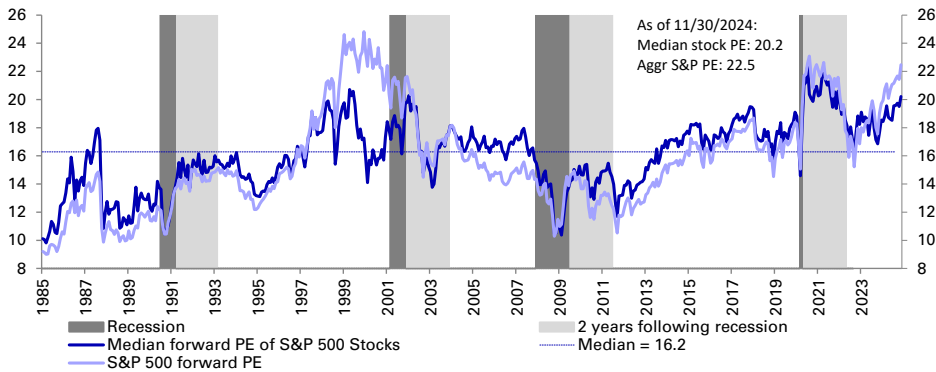


S&P 500 Implied Equity Risk Premium (ERP)

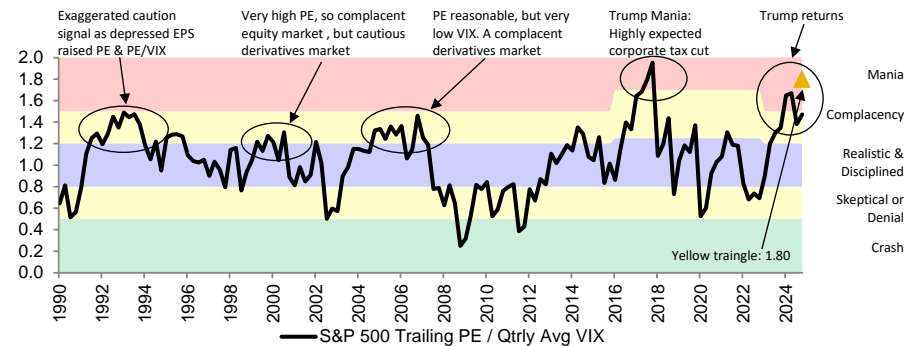


Red circle: ERP=2.0% implied by PE on our 2024 EPS estimate of \$245 and 2% assumed real 10 year interest rate
 Yellow square: ERP=2.3% implied by PE on our 2024 EPS estimate of \$245 and 1.75% assumed real 10 year interest rate
 Green triangle: ERP=2.5% implied by PE on our 2024 EPS estimate of \$245 and 1.5% assumed real 10 year interest rate

S&P 500 Forward price-to-earnings (P/E) ratio



S&P 500 PE / VIX (CBOE Volatility Index)

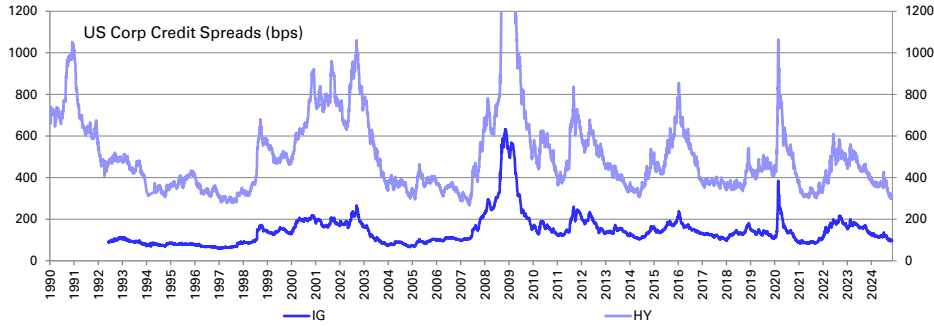


Yellow triangle: Trailing PE as of Dec 9 2024 divided by VIX on Dec 9 2024.

Source: Haver, Compustat, Clarifi, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

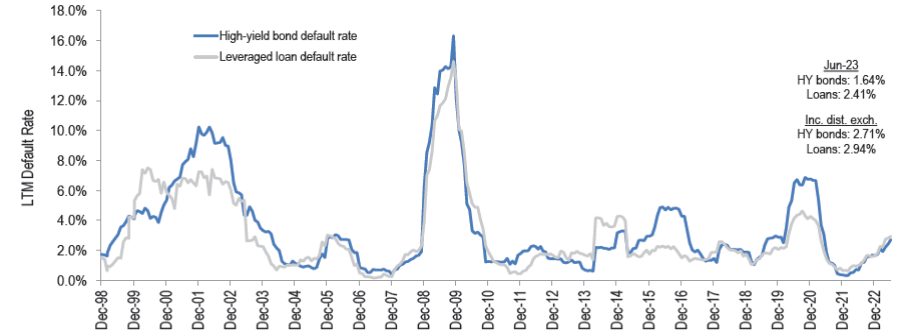
Fixed Income

Investment grade (IG) and high yield (HY) spreads

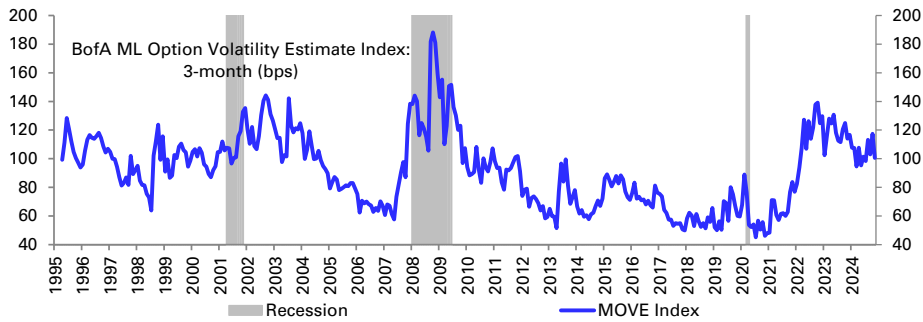


High yield bond and leveraged loan default rates

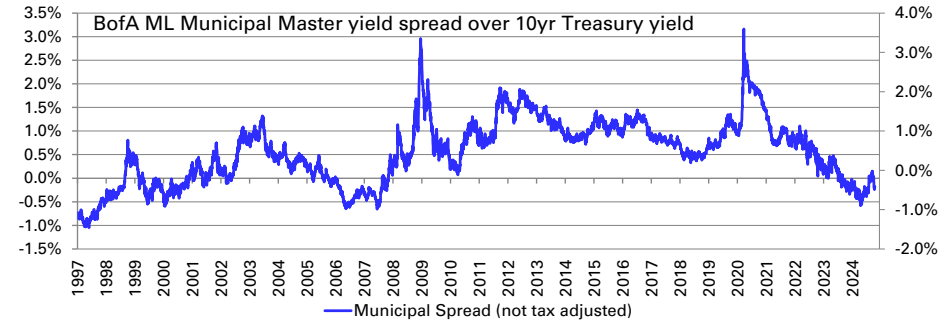
High-yield bond and loan par-weighted default rates



Interest rate volatility – MOVE index



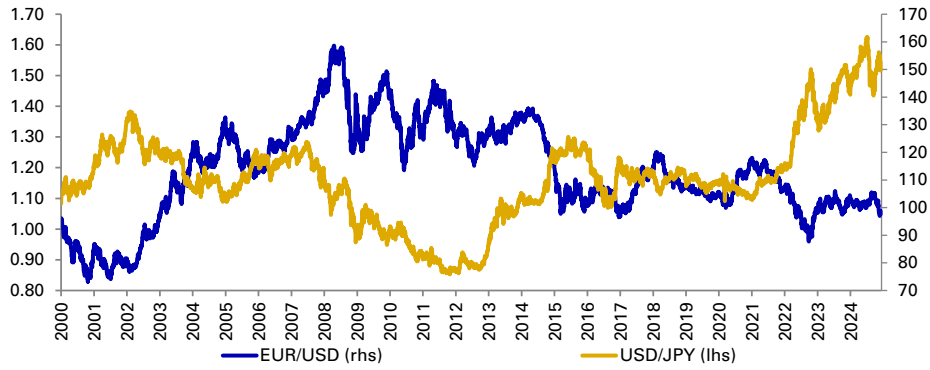
Municipal bond spread (not tax adjusted)



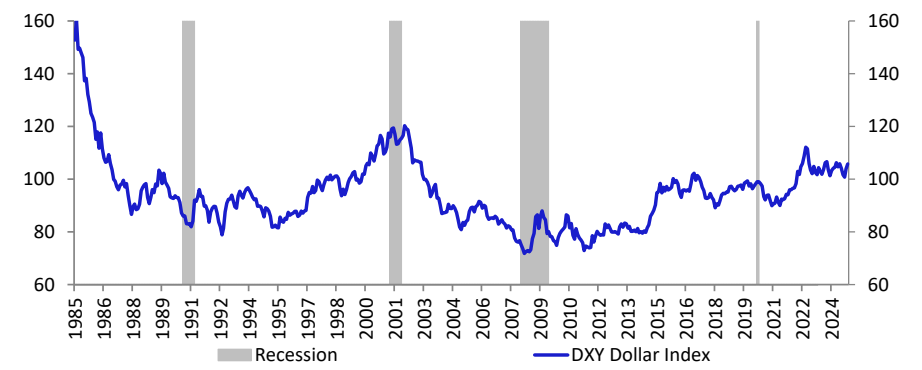
Source: Haver, J.P.Morgan, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance may not be indicative of future results.

Currency

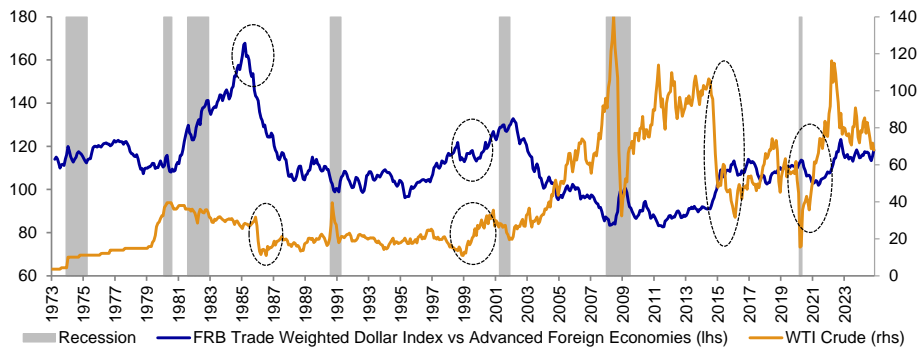
EUR/USD and USD/JPY



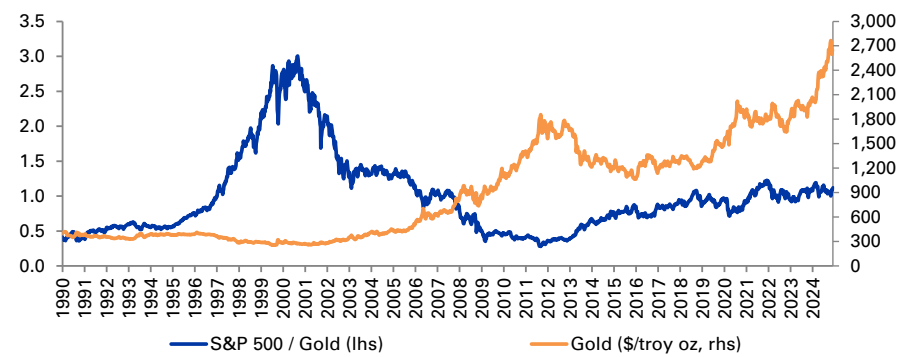
DXY (Bloomberg dollar vs. mature currencies) Index



U.S. Dollar vs. oil



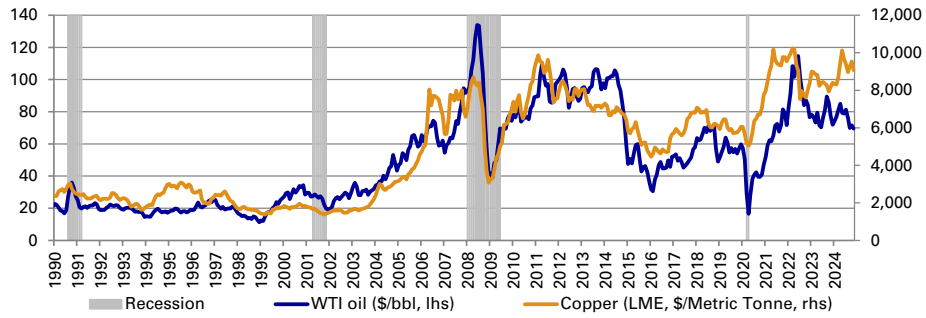
Gold



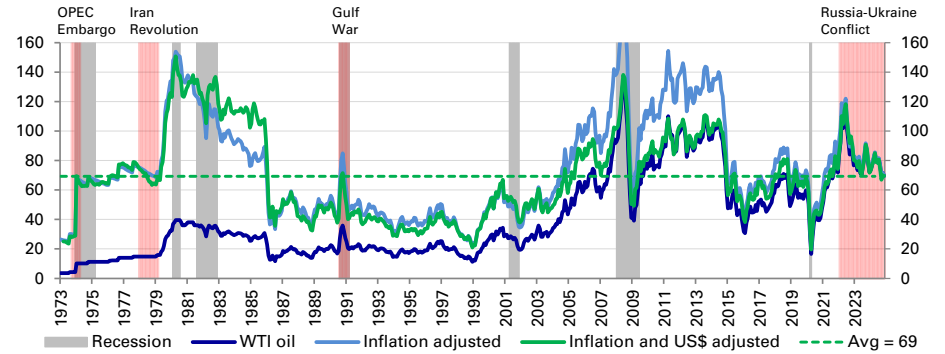
Source: Haver, DWS Investment GmbH as of December 2024, for illustrative purposes only. Past performance may not be indicative of future results.

Commodity

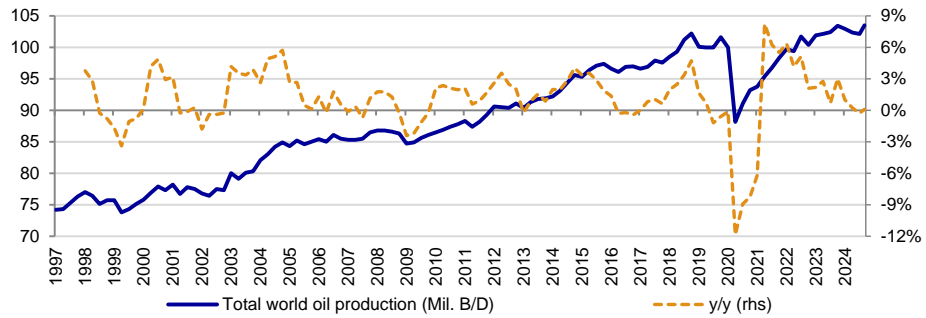
West Texas Intermediate (WTI) crude oil and copper



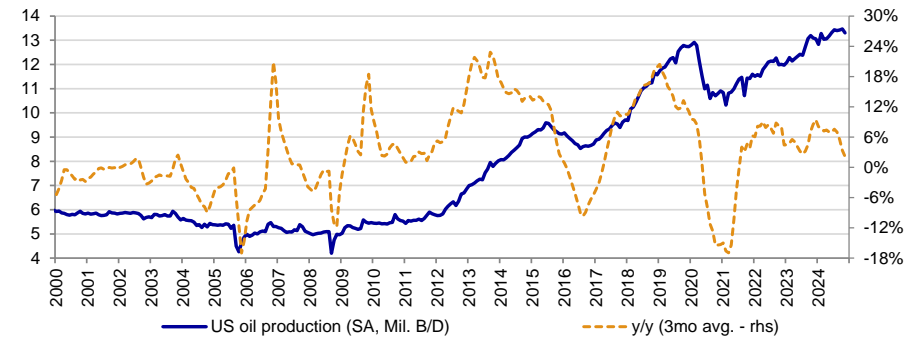
Inflation and U.S. Dollar adjusted WTI oil price



Global oil production

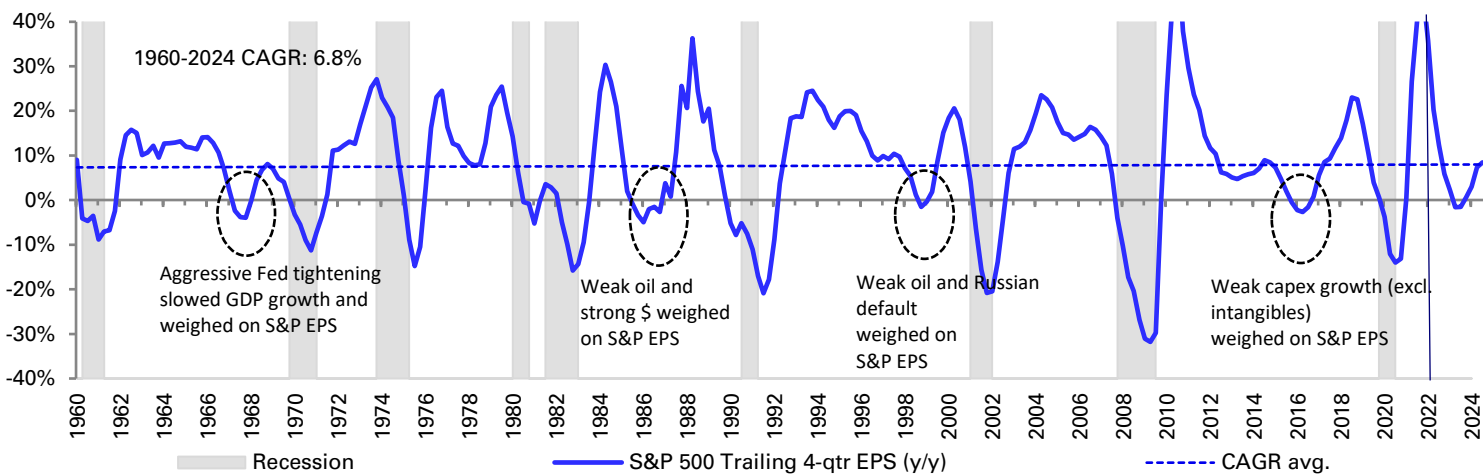
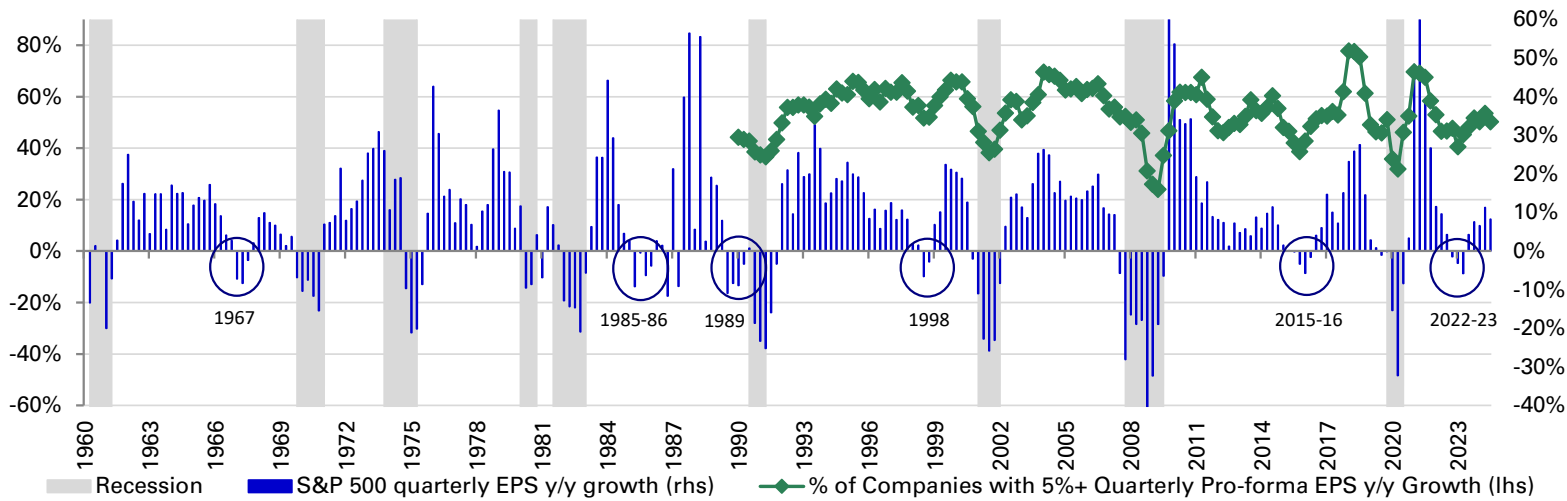


U.S. oil production



Source: Haver, EIA, DWS Investment GmbH as of December 2024, for illustrative purposes only.

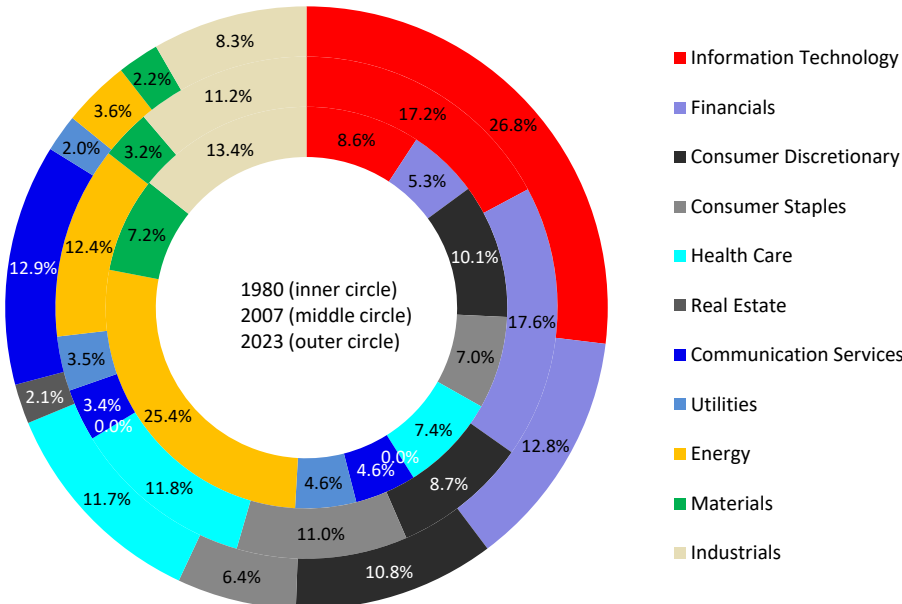
S&P 500 EPS growth



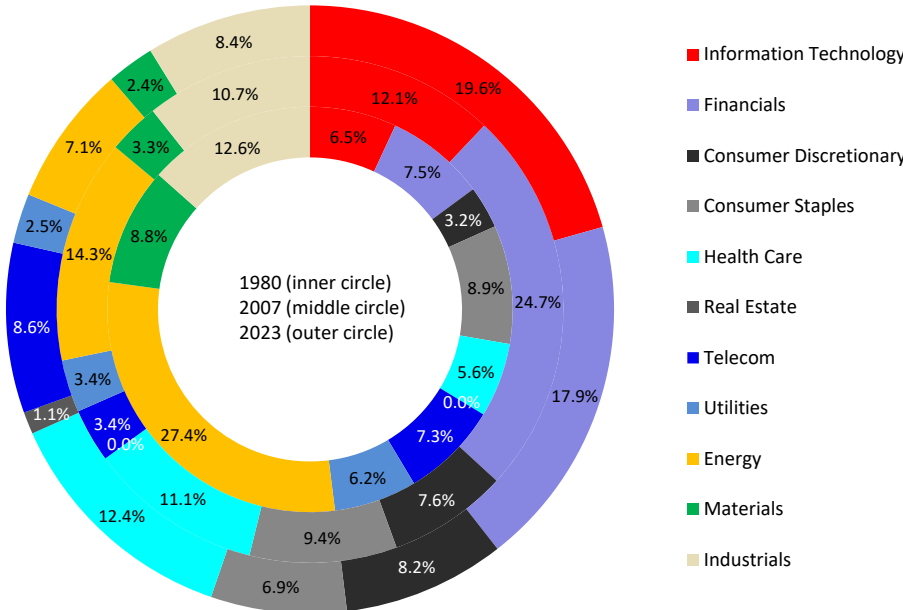
Source: Haver, IBES, Factset, DWS Investment GmbH as of December 2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 Sector Composition

S&P 500 sector composition by market cap

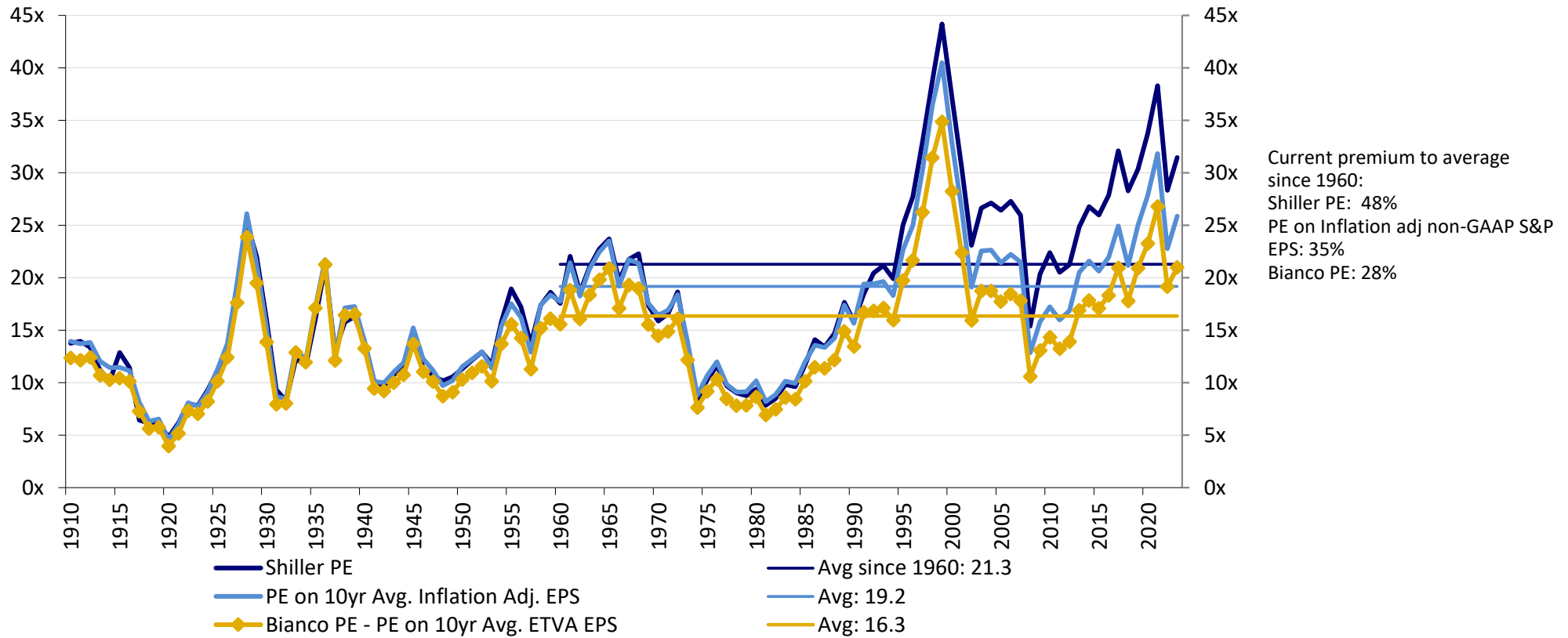


S&P 500 sector composition by earnings



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

Bianco PE: PE on equity time value adjusted EPS



Note: Bianco PE is the PE multiple based on the trailing 10-year average EPS adjusted by inflation and earnings retention ratio.

Shiller PE is the price earnings ratio based on average inflation-adjusted earnings from the previous 10 years, known as the Cyclically Adjusted PE Ratio (CAPE Ratio). It's developed by Robert J. Shiller.

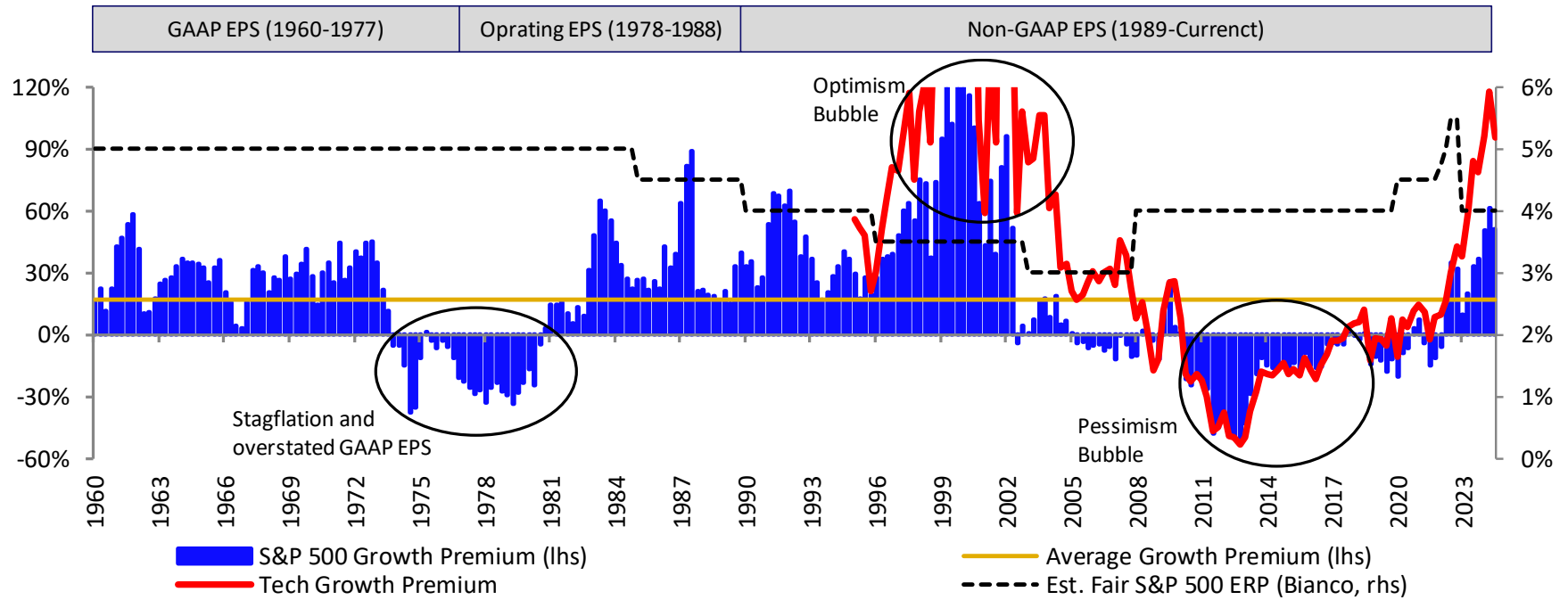
Source: IBES, Shiller, Factset, Haver, DWS Investment GmbH as of 12/31/2023, for illustrative purposes only. Past performance may not be indicative of future results.

S&P 500 PE by sector

	Financials	Energy	Materials	Industrials	Tech	Cons. Disc.	Cons. Staples	Health Care	Utilities	Communication Services	Real Estate	S&P 500
1991	14.8	18.0	22.3	30.1	42.8	23.0	20.7	25.3	17.9	31.9	N/A	25.6
1992	14.7	18.6	42.0	106.9	164.2	36.2	20.9	19.6	15.1	16.3	N/A	23.1
1993	10.9	20.2	31.7	27.7	112.5	16.9	21.6	20.5	20.6	23.8	N/A	21.3
1994	9.4	18.4	18.8	15.6	19.2	11.0	17.2	16.7	13.1	14.9	N/A	15.0
1995	12.3	17.6	11.7	16.5	16.4	16.3	19.6	21.8	13.3	16.4	N/A	16.3
1996	13.8	17.8	18.2	18.8	23.7	17.3	22.0	22.5	12.7	15.1	N/A	18.2
1997	18.2	19.2	19.4	20.9	24.3	20.9	26.2	28.7	15.3	22.1	N/A	21.5
1998	18.9	28.9	20.3	22.7	42.1	28.9	28.7	35.9	17.4	33.5	N/A	27.5
1999	16.0	30.4	23.8	25.3	62.6	29.7	22.8	28.1	14.3	32.8	N/A	29.0
2000	18.2	16.6	15.9	24.1	30.3	22.7	23.9	35.2	19.6	21.9	N/A	23.4
2001	18.0	14.1	33.4	25.3	57.1	34.2	20.9	27.6	12.1	24.6	N/A	24.7
2002	13.2	19.2	25.5	18.5	37.7	20.0	17.6	20.6	10.0	15.7	N/A	18.3
2003	14.5	14.8	31.6	22.9	37.0	23.9	20.5	21.3	14.4	16.5	N/A	20.4
2004	13.7	12.6	18.8	21.9	25.5	21.5	19.8	19.3	16.7	18.1	N/A	18.2
2005	13.6	10.9	15.7	18.3	21.9	19.8	18.5	18.8	16.2	15.3	N/A	16.4
2006	13.2	10.7	14.1	17.6	22.6	20.6	19.5	18.5	17.1	16.3	N/A	16.2
2007	12.8	13.5	16.7	17.2	22.6	18.7	19.5	16.7	17.9	16.3	N/A	16.5
2008	46.6	7.1	9.5	10.1	11.9	23.4	13.8	11.7	11.8	11.3	N/A	12.3
2009	30.7	18.7	29.8	17.9	20.4	20.6	15.0	12.8	13.2	15.8	N/A	18.4
2010	14.5	14.7	19.0	17.5	14.8	16.9	15.4	11.8	12.4	18.1	N/A	14.9
2011	11.8	10.4	12.4	13.9	12.6	15.3	15.7	11.9	14.3	18.0	N/A	12.9
2012	13.1	11.6	15.8	14.2	12.7	17.0	16.4	13.4	14.4	20.5	N/A	13.9
2013	14.8	14.7	19.1	18.3	16.0	20.7	18.8	18.0	15.4	16.2	N/A	16.9
2014	16.7	13.2	18.3	17.8	17.5	21.5	20.3	19.0	17.8	14.1	N/A	17.7
2015	14.4	25.5	17.2	16.1	17.3	20.7	21.1	17.4	16.0	12.6	N/A	17.5
2016	15.6	146.0	20.0	18.6	18.3	19.8	20.6	15.5	17.2	14.6	18.5	19.1
2017	17.4	35.6	22.4	21.3	21.1	23.0	21.4	17.7	18.2	13.5	19.1	20.6
2018	11.4	14.6	14.5	15.0	16.1	20.0	17.6	15.9	17.0	16.6	17.1	15.7
2019	14.0	21.3	20.8	19.2	23.8	25.0	21.5	17.5	20.9	20.9	21.0	20.1
2020	18.1	-174.6	27.4	42.7	31.6	48.8	22.4	18.2	19.7	26.5	21.5	27.4
2021	13.4	14.0	17.7	28.2	30.9	40.3	23.2	18.5	21.4	22.0	26.2	23.4
2022	13.7	8.4	14.5	20.6	20.8	27.0	21.8	16.8	20.2	15.0	16.8	17.6
2023	15.6	11.0	19.9	21.5	31.2	28.4	20.3	21.0	17.1	20.0	18.0	21.9
11/29/2024	19.1	15.2	23.8	27.8	35.1	31.3	23.0	21.4	20.6	21.8	19.6	25.6
Avg	13.8	13.3	17.6	19.9	30.4	22.1	19.3	20.5	14.2	15.6	20.0	16.3
Avg (ex. 74-82)	15.0	14.3	18.9	21.5	32.9	23.1	19.8	21.5	15.4	17.0	20.0	17.7
Avg (ex. 74-82, 97-00)	14.7	13.6	18.8	21.3	32.4	22.9	19.4	20.7	15.3	16.1	20.0	16.9
Avg (ex. 74-82, 97-00, 08-09)	13.7	13.6	18.8	21.6	33.0	23.0	19.6	21.0	15.4	16.2	20.0	17.0

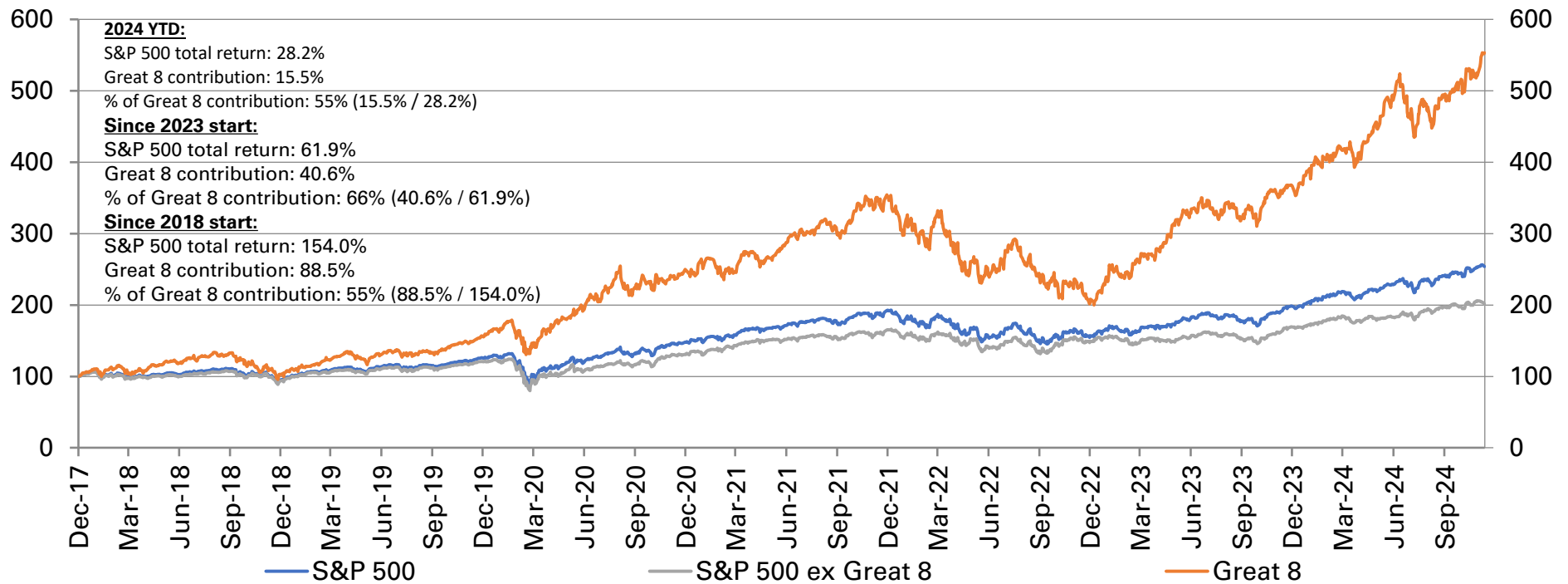
Source: Factset, IBES, DWS Investment GmbH as of December 2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 AND TECH SECTOR GROWTH PREMIUM



Source: IBES, Haver, DWS Investment GmbH as of 3Q2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

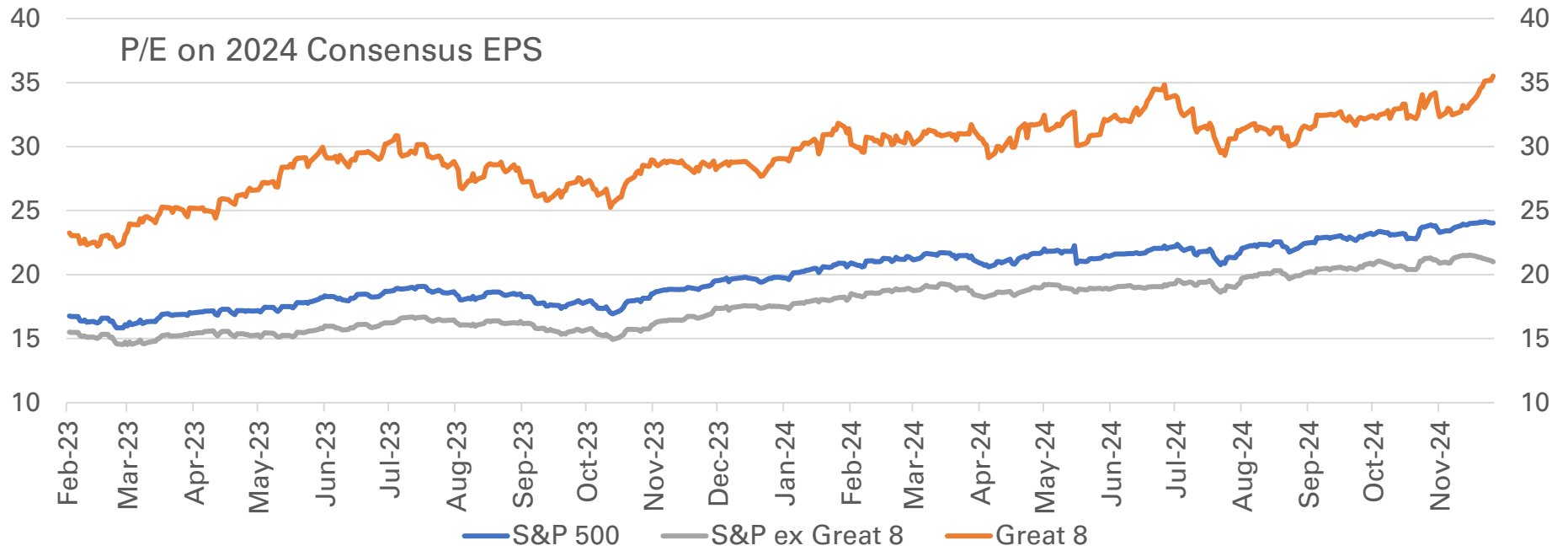
S&P 500 and The great 8 total return



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

Source: IBES, Factset, DWS Investment GmbH as of 12/10/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

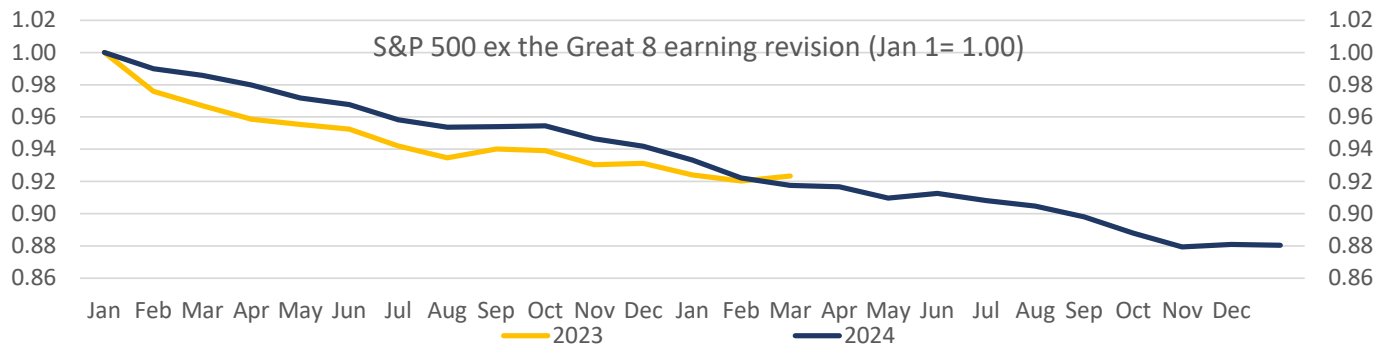
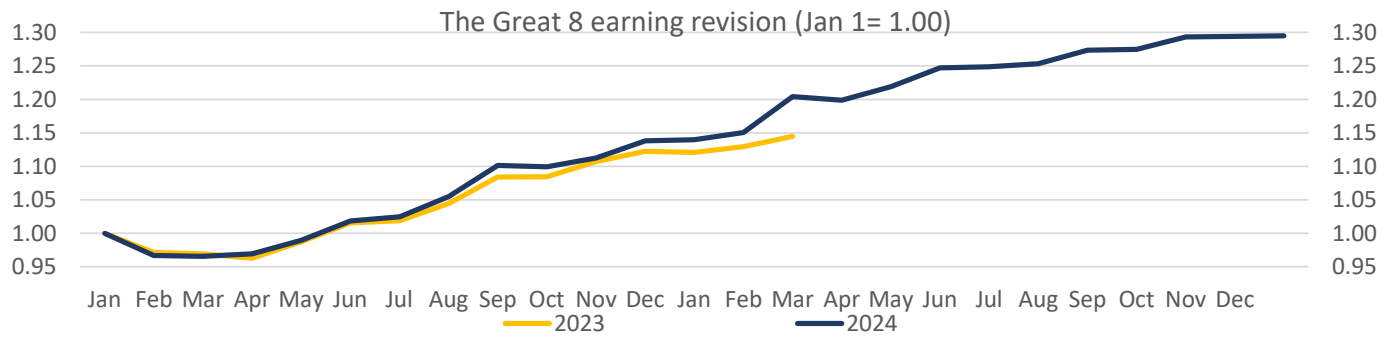
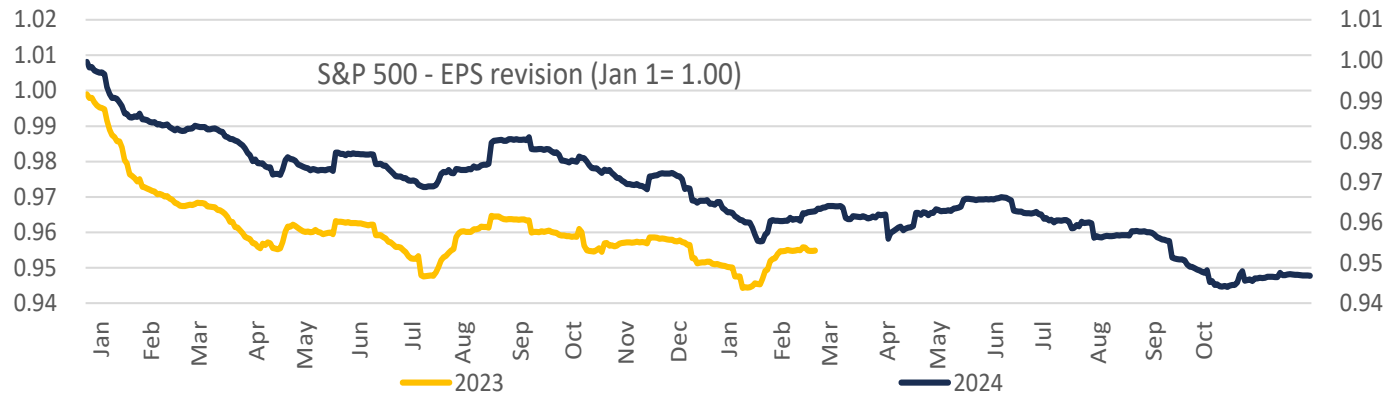
S&P 500 and The great 8 P/E ratio



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

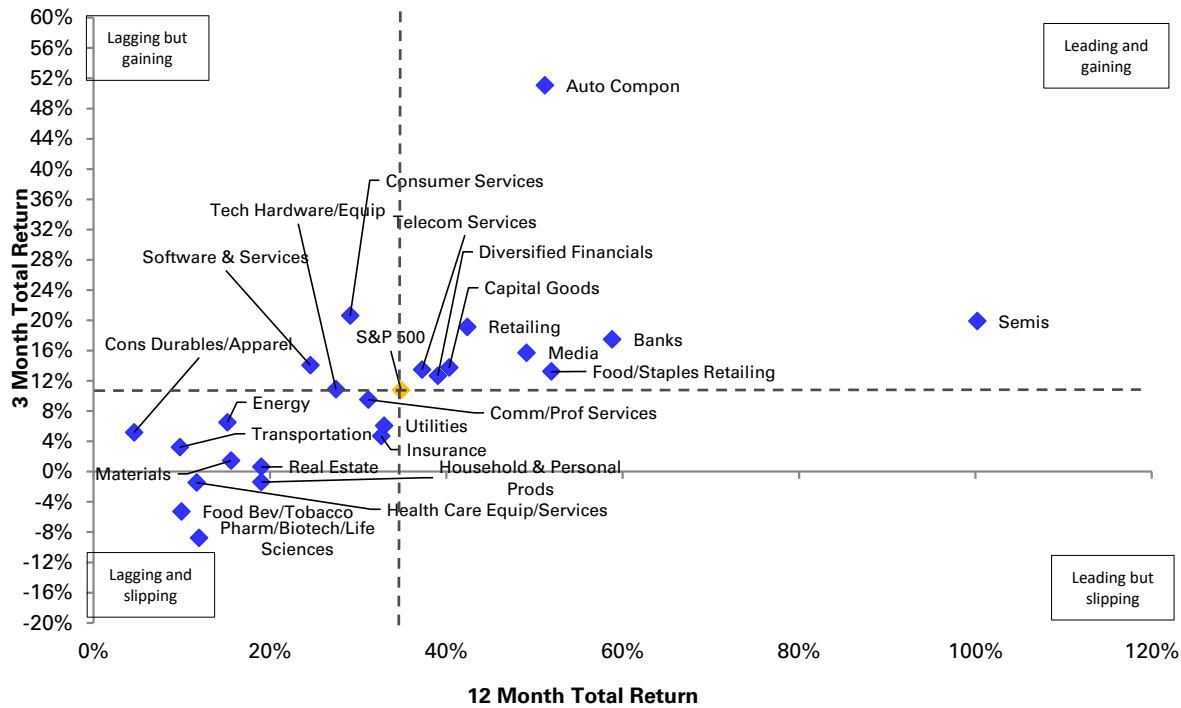
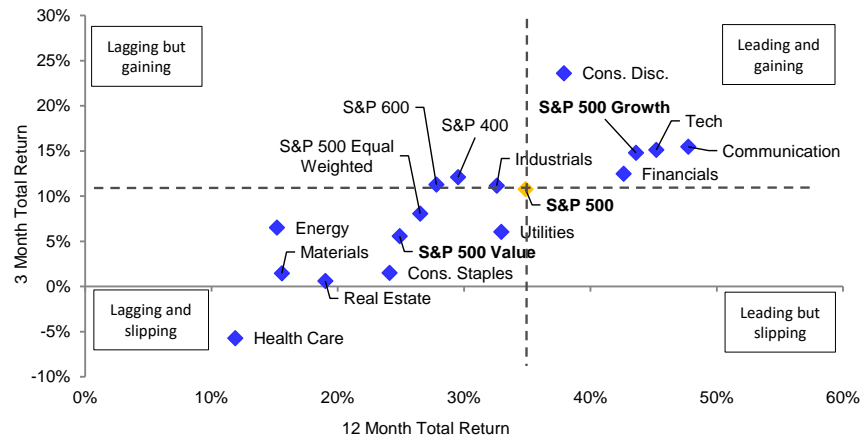
Source: IBES, Factset, DWS Investment GmbH as of 12/10/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 EPS revision



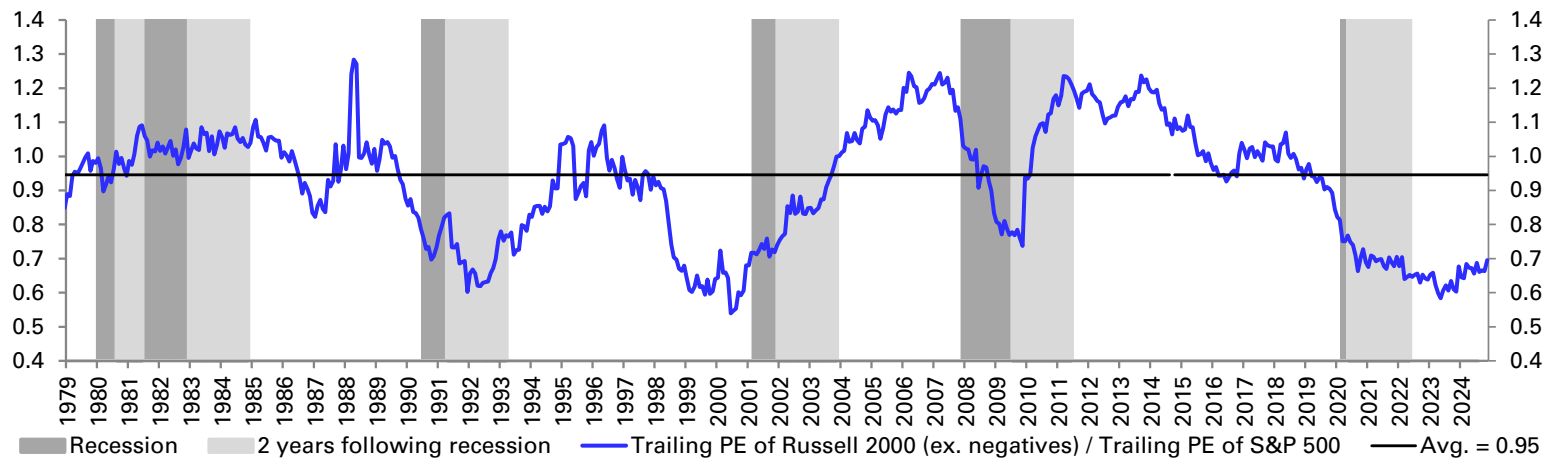
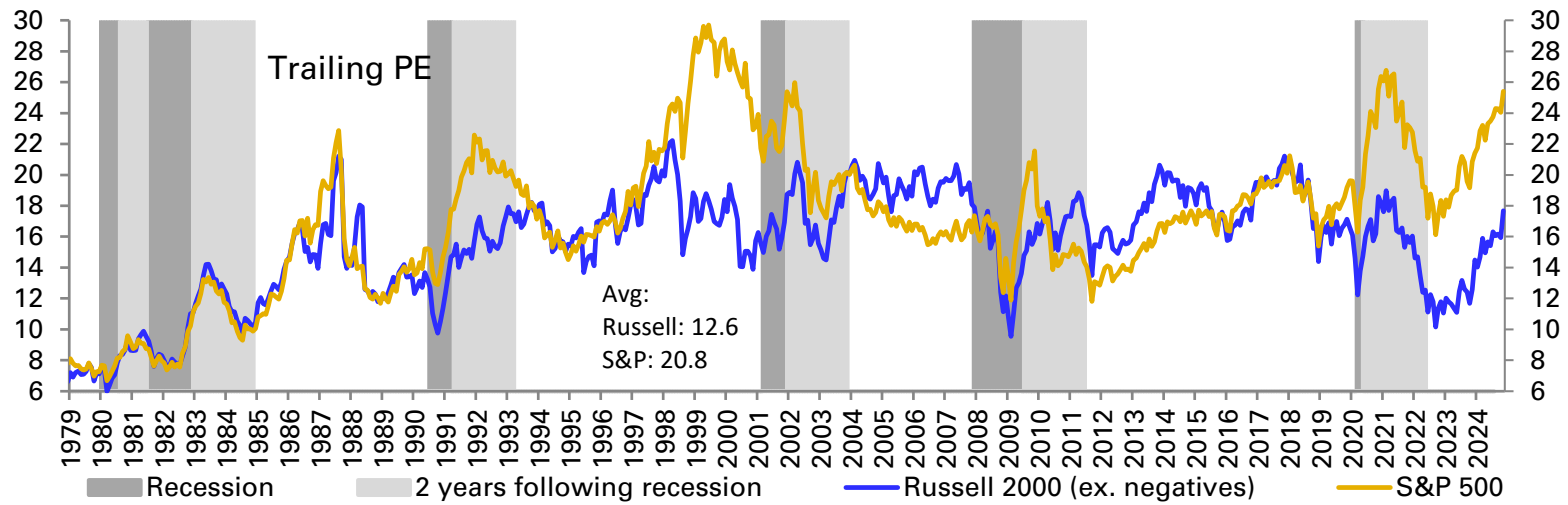
Source: IBES, Factset, DWS Investment GmbH as of 12/10/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

S&P 500 sector/industry group performance



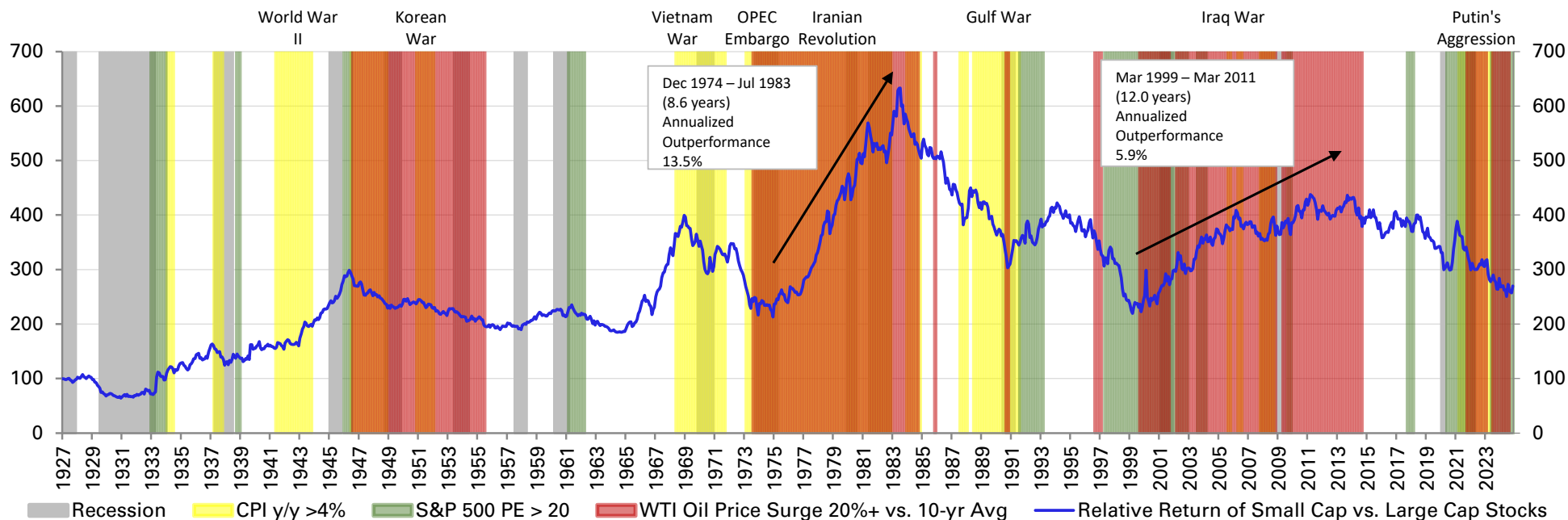
Source: IBES, Factset, DWS Investment GmbH as of 12/5/2024. Past performance may not be indicative of future results. It is not possible to invest directly in an index.

Relative PE of Russell 2000 vs. S&P 500



Source: Clarifi, Factset, Haver, DWS Investment GmbH as of 11/30/2024, for illustrative purposes only. Past performance may not be indicative of future results. Index returns do not reflect fees or expenses, and it is not possible to invest in an index.

Russell 2000 vs. S&P 500



Source: IBES, Factset, Haver, DWS Investment GmbH as of 11/30/2024, for illustrative purposes only. Past performance may not be indicative of future results. Index returns do not reflect fees or expenses, and it is not possible to invest in an index.

DWS Investment GmbH View: S&P 500 fair value by sector and industry: Assuming a ~5.25% real cost of equity (CoE) for overall S&P 500 (2 of 2)

	Market Value (\$bn)	Current 2025 PE	2025E Earnings (\$bn)	Normal Ratio	Normal 2025E Earnings	Accounting Quality Adjustment	Fully Adjusted Earnings	Net Debt / Market Cap	FCF / EPS	Real CoE	Steady State Value	Growth Premium	2025 Start Fair Value (\$bn)	2025E Dividend Yield	2025 End Fair Value (\$bn)	Fair PE on Normal 2025 EPS	2025 End Upside %	2025 End Upside vs. S&P 500
Electrical Equipment	324,832	21.7	15,000	110%	16,500	-5%	15,675	6%	N/A	5.25%	298,571	20%	358,286	1.3%	381,511	23.1	17%	13%
Industrial Conglomerates	230,491	20.0	11,500	100%	11,500	-5%	10,925	13%	1.05	5.20%	210,096	5%	220,601	1.9%	233,298	20.3	1%	-3%
Machinery	864,481	19.2	45,000	100%	45,000	-5%	42,750	19%	0.96	5.40%	791,667	5%	831,250	1.3%	885,777	19.7	2%	-2%
Professional Services	333,647	26.9	12,400	100%	12,400	0%	12,400	6%	1.09	5.00%	248,000	15%	285,200	1.5%	302,292	24.4	-9%	-13%
Ground Transportation	423,138	21.7	19,500	100%	19,500	-10%	17,550	16%	0.65	5.00%	351,000	10%	386,100	1.4%	409,809	21.0	-3%	-7%
Trading Companies & Distributors	150,029	23.1	6,500	100%	6,500	-5%	6,175	11%	0.78	5.20%	118,750	10%	130,625	1.1%	139,210	21.4	-7%	-11%
INFORMATION TECHNOLOGY	16,392	29.3	560.0	103%	578.3	-2%	567	2%	0.95	5.10%	11,111	40%	15,556	0.6%	16,645	28.8	2%	-2%
Communications Equipment	377,206	17.1	22,000	100%	22,000	-7%	20,460	-4%	1.07	5.20%	393,462	10%	432,808	2.0%	457,571	20.8	21%	17%
Technology Hardware Storage & Peripherals	4,230,220	31.6	134,000	100%	134,000	-1%	132,660	2%	1.03	5.00%	2,653,200	35%	3,581,820	0.4%	3,834,744	28.6	-9%	-13%
Electronic Equipment Instruments & Components	303,681	22.5	13,500	100%	13,500	-7%	12,555	9%	1.07	5.50%	228,273	15%	262,514	0.9%	281,079	20.8	-7%	-11%
IT Services	592,922	23.3	25,500	100%	25,500	-3%	24,735	8%	1.18	5.00%	494,700	20%	593,640	1.8%	627,694	24.6	6%	2%
Semiconductors & Semiconductor Equipment	5,620,434	27.7	203,000	105%	213,150	-5%	202,493	2%	0.92	5.50%	3,681,682	35%	4,970,270	0.5%	5,342,956	25.1	-5%	-9%
Software	5,267,901	32.5	162,000	105%	170,100	2%	173,502	1%	0.90	4.90%	3,540,857	50%	5,311,286	0.6%	5,673,496	33.4	8%	4%
MATERIALS	1,088	21.1	51.5	98%	50.5	-7%	47	16%	0.90	5.50%	853	10%	938	1.8%	997	19.8	-8%	-12%
Chemicals	677,523	21.5	31,500	100%	31,500	-5%	29,925	17%	0.81	5.35%	559,346	15%	643,248	1.9%	681,517	21.6	1%	-3%
Construction Materials	69,910	28.0	2,500	95%	2,375	-10%	2,138	7%	0.82	5.75%	37,174	0%	37,174	0.6%	40,009	16.8	-43%	-47%
Containers & Packaging	199,423	24.0	8,300	100%	8,300	-10%	7,470	31%	1.12	5.50%	135,818	0%	135,818	1.7%	144,354	17.4	-28%	-32%
Metals & Mining	141,427	15.4	9,200	90%	8,280	-10%	7,452	7%	0.62	6.00%	124,200	0%	124,200	2.0%	132,302	16.0	-6%	-10%
REAL ESTATE	997	17.8	56.0	100%	56.1	-10%	50	35%	1.79	5.25%	961	5%	1,009	3.6%	1,051	18.7	5%	1%
Health Care REITs	107,844	18.0	6,000	100%	6,000	-7%	5,580	36%	7.80	4.75%	117,474	0%	117,474	3.7%	121,676	20.3	13%	9%
Hotel & Resort REITs	13,358	8.9	1,500	90%	1,350	-20%	1,080	25%	1.98	7.00%	15,429	-15%	13,114	4.2%	13,808	10.2	3%	-1%
Industrial REITs	86,916	16.1	5,400	100%	5,400	-7%	5,022	28%	1.81	5.25%	95,657	5%	100,440	4.1%	104,115	19.3	20%	16%
Office REITs	11,663	13.0	900	90%	810	-20%	648	63%	4.27	6.50%	9,969	0%	9,969	4.9%	10,380	12.8	-11%	-15%
Residential REITs	137,488	18.3	7,500	95%	7,125	-10%	6,413	33%	1.81	4.75%	135,000	0%	135,000	3.5%	140,040	19.7	2%	-2%
Retail REITs	123,656	13.0	9,500	95%	9,025	-15%	7,671	48%	2.03	6.00%	127,854	0%	127,854	5.5%	131,692	14.6	6%	2%
Specialized REITs	443,612	19.2	23,100	105%	24,255	-10%	21,830	36%	1.23	5.20%	419,798	10%	461,778	3.6%	480,904	19.8	8%	4%
Real Estate Management & Development	72,790	34.7	2,100	100%	2,100	-3%	2,037	0%	0.95	5.00%	40,740	25%	50,925	-	54,744	26.1	-25%	-29%
COMMUNICATION SERVICES	5,062	20.7	245.0	100%	244.8	-5%	233	11%	0.83	5.10%	4,560	20%	5,472	0.8%	5,842	23.9	15%	11%
Diversified Telecommunication Services	341,363	9.8	35,000	75%	26,250	-15%	22,313	94%	-0.28	4.75%	469,737	-25%	352,303	5.7%	357,857	13.6	5%	1%
Entertainment	715,181	30.4	23,500	120%	28,200	-8%	25,944	15%	1.59	5.25%	494,171	50%	741,257	0.3%	796,635	28.2	11%	7%
Interactive Media & Services	3,609,006	23.3	155,000	105%	162,750	-2%	159,495	-4%	0.69	5.15%	3,096,990	25%	3,871,238	0.4%	4,153,341	25.5	15%	11%
Media	280,834	10.8	26,000	85%	22,100	-10%	19,890	69%	0.99	5.50%	361,636	-15%	307,391	2.2%	325,148	14.7	16%	12%
Wireless Telecommunication Services	115,668	21.0	5,500	100%	5,500	-8%	5,060	39%	1.41	4.75%	106,526	10%	117,179	1.3%	124,155	22.6	7%	3%
UTILITIES	1,139	16.6	68.5	111%	76.1	-7.0%	71	79%	-0.81	5.25%	1,348	0%	1,348	3.0%	1,412	18.5	24%	20%
Electric Utilities	722,905	16.1	44,900	111%	49,839	-7%	46,350	80%	1.15	5.20%	891,351	7%	953,746	3.1%	997,920	20.0	38%	34%
Gas Utilities	20,053	18.2	1,100	100%	1,100	-5%	1,045	43%	-1.16	5.00%	20,900	0%	20,900	2.7%	21,904	19.9	9%	5%
Independent Power and Renewable Electricity	66,091	16.9	3,900	125%	4,875	-10%	4,388	80%	-4.16	7.00%	62,679	10%	68,946	1.2%	74,657	15.3	13%	9%
Multi-Utilities	306,430	17.5	17,500	110%	19,250	-7%	17,903	79%	-1.06	5.20%	344,279	0%	344,279	3.4%	358,919	18.6	17%	13%
Water Utilities	23,494	22.4	1,050	100%	1,050	-3%	1,019	51%	-0.97	4.50%	22,633	0%	22,633	2.5%	23,643	22.5	1%	-3%

Source: IBES, DWS Investment GmbH as of 12/17/2024. Past performance may not be indicative of future results. 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 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 2025 year end upside is on absolute valuation basis of each sector, not on relative sector valuation basis.

S&P 500 industry monitor (1 of 2)

Sector	Industry	PE on 2023 EPS	PE on 2024 Consensus EPS	2024 Consensus EPS Growth	2025 Consensus EPS Growth	2024 EPS 3m Revision	3m Total Return Momentum	2025 End Upside (Intrinsic Valuation)	Combined Signal
Consumer Discretionary		31.3	28.1	23.8%	11.6%	-0.2%	22.8%	-6.5%	1
	Automobile Components	8.8	7.8	11.7%	12.4%	0.3%	-13.2%	42.3%	0
	Automobiles	42.9	39.5	-11.5%	8.5%	1.7%	60.8%	-40.8%	1
	Household Durables	13.8	13.1	8.3%	5.3%	-0.2%	0.1%	16.8%	0
	Leisure Products	16.6	14.6	12.8%	14.0%	3.9%	-2.7%	13.3%	0
	Textiles Apparel & Luxury Goods	24.1	23.8	6.6%	1.3%	-34.6%	22.0%	-13.4%	0
	Hotels Restaurants & Leisure	27.7	24.4	26.7%	13.6%	-0.8%	18.8%	0.9%	1
	Distributors	17.3	16.4	-11.9%	5.4%	-8.1%	-2.5%	15.7%	-1
	Broadline Retail	39.6	33.2	127.6%	19.3%	8.4%	19.3%	8.3%	1
	Specialty Retail	26.4	24.9	-0.5%	6.1%	-0.1%	11.4%	-0.6%	0
Consumer Staples		23.0	21.8	7.1%	5.3%	-0.7%	1.8%	3.8%	0
	Consumer Staples Distribution & Retail	32.1	30.3	4.8%	5.7%	-1.5%	11.2%	-6.7%	0
	Food Products	15.5	15.4	-5.5%	0.9%	-1.7%	-6.2%	15.8%	-1
	Beverages	20.7	19.6	8.7%	5.8%	-0.1%	-7.8%	19.1%	0
	Tobacco	16.0	14.9	5.7%	7.5%	1.0%	6.1%	-7.2%	0
	Household Products	26.0	24.4	13.4%	6.3%	0.1%	1.1%	-4.1%	0
	Personal Care Products	24.0	22.6	424.1%	6.3%	-5.5%	1.2%	13.6%	-1
Energy		15.6	14.9	-24.0%	4.8%	-8.6%	7.4%	-3.3%	-1
	Energy Equipment & Services	13.6	12.6	20.1%	7.9%	-1.8%	11.5%	38.6%	0
	Oil Gas & Consumable Fuels	15.8	15.1	-26.6%	4.5%	-9.2%	7.1%	-5.3%	-1
Financials		18.8	17.5	15.9%	7.4%	1.5%	12.4%	-1.1%	0
	Banks	13.7	13.3	2.2%	2.9%	2.0%	16.2%	11.3%	1
	Financial Services	26.3	24.5	16.4%	7.6%	-0.4%	7.7%	-9.4%	0
	Consumer Finance	16.1	15.4	22.1%	4.1%	4.1%	24.3%	-11.9%	1
	Capital Markets	22.6	20.0	23.5%	12.8%	2.3%	18.2%	-20.0%	1
	Insurance	16.2	14.6	39.9%	11.1%	1.2%	5.3%	18.4%	1
Health Care		21.3	17.8	0.5%	20.0%	-1.5%	-5.9%	21.0%	-1
	Health Care Providers & Services	16.7	15.3	0.9%	9.5%	-3.8%	-4.3%	43.6%	-1
	Health Care Equipment & Supplies	27.3	24.9	17.9%	9.9%	-0.9%	3.3%	6.7%	0
	Life Sciences Tools & Services	27.1	24.9	-5.1%	8.8%	-0.2%	-8.4%	-5.0%	-1
	Biotechnology	21.1	16.2	-16.6%	30.8%	2.3%	-10.0%	26.7%	-1
	Pharmaceuticals	20.8	15.7	3.9%	32.4%	-2.0%	-9.9%	19.8%	-1
Industrials		27.6	23.3	3.8%	18.5%	-6.7%	10.6%	2.9%	0
	Aerospace & Defense	46.0	25.9	-11.1%	77.5%	-29.6%	2.5%	12.4%	-1
	Building Products	26.2	24.2	4.6%	8.4%	-2.0%	13.2%	-12.3%	0
	Trading Companies & Distributors	27.3	25.2	7.9%	8.2%	-0.8%	23.5%	-7.2%	0
	Electrical Equipment	35.3	30.0	24.3%	17.8%	-1.7%	21.4%	17.4%	1
	Construction & Engineering	39.5	33.6	27.3%	17.4%	0.5%	32.9%	-19.4%	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 12/17/2024. Past performance may not be indicative of future results. 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 industry monitor (2 of 2)

Sector	Industry	PE on 2023 EPS	PE on 2024 Consensus EPS	2024 Consensus EPS Growth	2025 Consensus EPS Growth	2024 EPS 3m Revision	3m Total Return Momentum	2025 End Upside (Intrinsic Valuation)	Combined Signal
	Industrial Conglomerates	20.9	19.3	-2.5%	8.2%	0.4%	9.0%	1.2%	0
	Machinery	21.1	20.9	1.2%	0.9%	0.5%	16.9%	2.5%	0
	Commercial Services & Supplies	38.3	34.7	34.1%	10.4%	-34.7%	9.9%	-19.2%	0
	Professional Services	30.9	27.6	12.1%	12.0%	-2.0%	9.3%	-9.4%	0
	Air Freight & Logistics	17.7	15.4	-10.3%	14.6%	-0.2%	3.8%	10.8%	0
	Passenger Airlines	12.0	9.6	-2.9%	24.2%	6.6%	56.2%	4.8%	1
	Ground Transportation	26.8	23.3	18.8%	15.0%	7.9%	1.8%	-3.1%	1
Information Technology		34.7	28.6	26.6%	21.6%	-9.8%	11.6%	1.5%	0
	IT Services	25.1	23.5	8.9%	6.6%	0.5%	9.6%	5.9%	0
	Software	36.8	32.6	19.6%	13.0%	0.1%	10.8%	7.7%	0
	Communications Equipment	21.9	21.0	-4.0%	4.3%	1.7%	18.9%	21.3%	1
	Technology Hardware Storage & Peripherals	32.5	28.9	17.1%	12.3%	-9.7%	7.0%	-9.3%	0
	Electronic Equipment Instruments & Components	26.0	23.2	4.5%	12.1%	0.8%	13.7%	-7.4%	1
	Semiconductors & Semiconductor Equipment	38.6	27.0	60.2%	43.1%	-20.7%	14.8%	-4.9%	1
Materials		24.5	20.8	-12.2%	18.0%	-4.4%	2.9%	-8.4%	-1
	Chemicals	25.0	21.8	-12.1%	15.0%	-4.5%	1.5%	0.6%	-1
	Construction Materials	37.1	30.0	2.1%	23.8%	-8.0%	17.3%	-42.8%	0
	Metals & Mining	18.0	14.8	-18.3%	22.0%	-4.2%	-0.8%	-6.5%	-1
	Containers & Packaging	30.2	23.8	-2.9%	26.9%	-2.4%	9.3%	-27.6%	-1
Real Estate		41.6	38.6	8.6%	7.7%	-1.6%	2.4%	5.4%	0
	Industrial REITs	32.7	33.7	7.8%	-3.1%	24.7%	-9.0%	19.8%	0
	Hotel & Resort REITs	19.1	20.1	-8.4%	-5.1%	-2.9%	7.0%	3.4%	-1
	Office REITs	40.0	47.4	-21.9%	-15.5%	-5.5%	10.1%	-11.0%	-1
	Health Care REITs	79.3	72.8	120.6%	8.9%	12.5%	4.8%	12.8%	1
	Residential REITs	43.0	48.3	-6.4%	-10.8%	1.1%	-0.4%	1.9%	-1
	Retail REITs	35.5	32.8	-6.7%	8.4%	-6.5%	2.9%	6.5%	-1
	Specialized REITs	41.6	36.6	14.5%	13.8%	-8.2%	3.4%	8.4%	0
	Real Estate Management & Development	41.6	32.8	7.4%	27.0%	4.0%	13.0%	-24.8%	1
Communication Services		21.9	19.0	37.0%	15.1%	4.0%	14.2%	15.4%	1
	Diversified Telecommunication Services	9.9	9.7	-7.4%	2.1%	0.6%	7.6%	4.8%	0
	Wireless Telecommunication Services	26.1	23.0	45.9%	13.4%	1.2%	22.5%	7.3%	1
	Media	11.2	10.9	11.4%	3.4%	1.4%	10.1%	15.8%	0
	Entertainment	69.4	30.3	11.3%	128.9%	6.5%	31.3%	11.4%	1
	Interactive Media & Services	23.2	20.7	67.5%	12.0%	5.3%	11.8%	15.1%	1
Utilities		20.0	18.4	19.5%	8.7%	0.6%	7.2%	23.9%	0
	Multi-Utilities	20.4	18.6	4.7%	9.8%	0.0%	7.2%	17.1%	0
	Water Utilities	25.7	23.8	8.6%	8.3%	0.4%	-5.0%	0.6%	0
	Gas Utilities	21.6	20.4	12.4%	5.8%	0.5%	13.3%	9.2%	0
	Electric Utilities	19.6	18.4	25.8%	6.8%	1.2%	4.8%	38.0%	1
	Independent Power and Renewable Electricity Producers	20.1	15.7	37.5%	27.9%	-3.7%	63.1%	13.0%	1
S&P 500		25.5	22.3	12.7%	14.3%	-3.2%	9.5%	5.1%	0

Combined signal rules: Green – at least 2 of the following 3 must be green: EPS growth, EPS revision, price momentum

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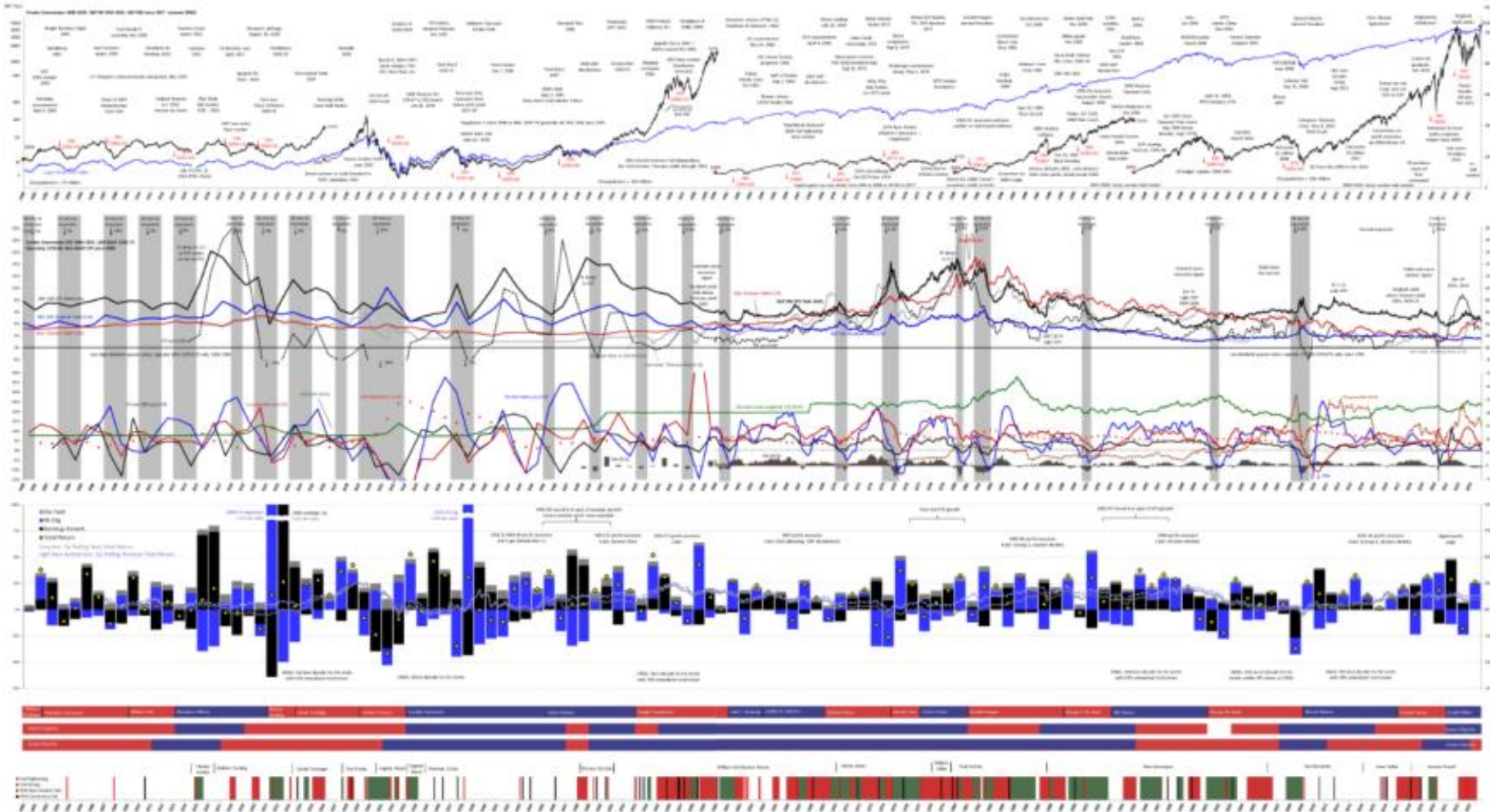
Source: Factset, DWS Investment GmbH as of 12/17/2024. Past performance may not be indicative of future results. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

20 Investment Strategy Principles

1. The value of a stock is the present value of all its future free cash flows. Do not rely on any valuation methodology that does not reconcile with this concept.
2. S&P is not U.S. GDP. Long-term S&P EPS growth \neq U.S. GDP growth. The S&P 500 differs regionally and by sector; it's global, digital and increasingly medical. EPS growth is a function of retained EPS and incremental returns.
3. Perception of normalized EPS can drive short-term S&P 500 performance, but actual EPS through the cycle will drive most S&P 500 long-term performance. S&P 500 margins exhibit cyclical, but not secular mean reversion. Assess normal EPS with rigorous fundamental analysis, be leery of simple shortcuts.
4. True EPS is usually between generally accepted accounting principles (GAAP) and non-GAAP measures. True earnings will equal FCF when no investment is made for growth. At steady-state, $EPS = FCF/sh. = DPS$. Prefer EPS yield over FCF yield, unless a difference other than investment recurs.
5. Equities are real assets. Long-term growth will equal inflation when $EPS=DPS$ (dividend per share). A fair PE on normalized steady-state $EPS = 1/$ a fair long-term real stock return. If expected long-term real EPS growth + dividend yield = fair real cost of equity (CoE), then a steady-state exists. EPS & DPS yields are real; compare to real interest rates.
6. A secular decline in yields is good for stocks, but a cyclical decline is bad. It can take hindsight to differentiate. Fed influence is secular like, if ahead-of-the-curve.
7. Risk is an outcome different than expected. Uncertainty (vol) is a very uncertain variable. Mean reversion is a fair assumption.
8. Only economic profit growth justifies a PE greater than $1/$ real CoE. Consider long-term growth potential along with the investments required to support it.
9. GDP growth affects the fair PE only to the extent that it affects the ability of a company to earn returns above its cost of capital. Slow GDP growth often best.
10. Value investors seek stocks with normalized earnings greater than market expectations. Growth investors seek stocks with economic profit growth potential greater than market expectations. No rule against seeking both.
11. The market has predicted 9 of the last 5 recessions. Avoid panic selling. It usually takes a recession to stop a bull market (exceptions: 1966, 1987, 1998).
12. Natural disasters are less market damaging than manmade disasters. U.S. military strike preparations can pressure stocks, but typically rally on military action.
13. Investor panic subsides when policy setter panic begins. Respect the Fed's firepower, but its arsenal will be exhausted if inflation (Unit labor costs, or ULCs) is a problem.
14. Flows follow returns, not vice versa, so stay return focused and don't follow.
15. Lack of patience is the market's most reliable inefficiency.
16. Seek truth with scientific method: Theory first, then observation and experience.
17. Trends will continue until they don't. Valuation doesn't matter until it does.
18. Confront market/sector PE extremes vs. historical averages, but respect industry/stock PE extremes.
19. The market is an imperfect price mechanism, but superior to all others. Those who improve its function earn gains slowly, those who don't can lose suddenly.
20. Diversification comes from the correlation of stocks, not the number of stocks. Don't substitute diversification for diligence.

Source: DWS Investment GmbH. For illustrative purposes only.

U.S. stock market since 1900



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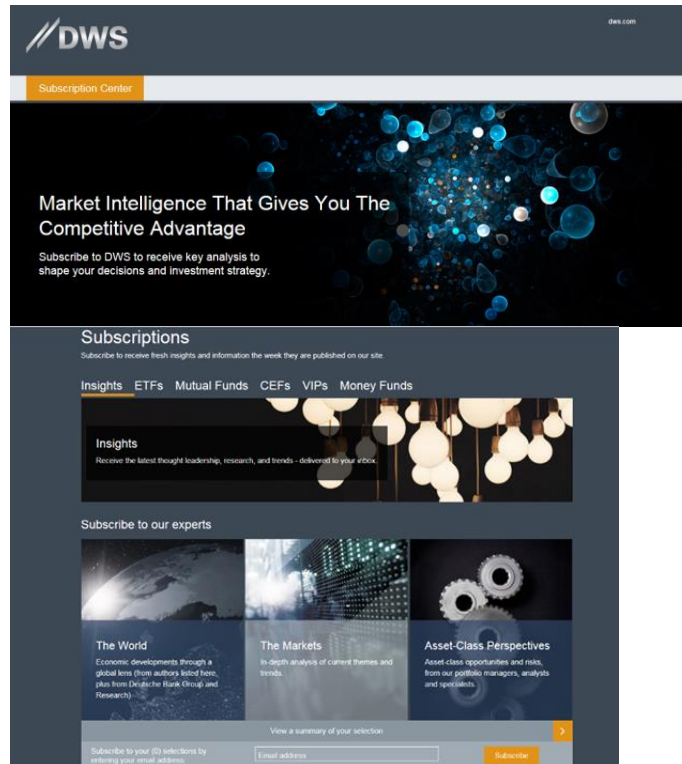
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