

# 2024 Outlook: Long live this faint cycle or bumps toward a new one?



**David Bianco**  
Americas Chief Investment Officer  
DWS

**An answer year: A soft landing, U.S. elections, more geopolitical rift or repair?**  
2024 should provide answers to many key investor debates; whether a soft or hard landing follows the Fed's many hikes to fight inflation, determining a short or longer lasting expansion post COVID. This will shape monetary policy and normal interest rates. Yet, fiscal policy remains on an unsustainable path. U.S. elections can set new paths, influenced by the candidates and conditions. Beyond elections during a pivotal cyclical year, peace is still not yet found and U.S. and China tensions remain high as each tightens its circle of friends. If two cliques form, we'll judge the situation by the friends each keeps and the new friends each attracts. Beyond the macro, we watch powerful micro and thematic forces such as AI, which stole the show in 2023 and might again for the decade, but probably not in 2024.

## Investment themes and views for 2024:

- Small US recession 1H, sub 1% 2024 GDP in US & Europe, but corporate profits climb:**  
We expect a small recession in 1H24 led by continued weakness in durable goods demand and manufacturing, slow service consumption as jobs growth stalls along with a brief dip in investment spending as companies look to protect margins by curbing hiring, inventories and capex until more macro and cost of capital clarity emerges later in 2024. Despite brief GDP contraction, we expect very limited jobs losses owing to resilience in service consumption and tightness in labor supply from demographics. We expect disinflation, not deflation, benign credit costs and higher profits.
- 2024E S&P EPS \$242 up 8.5%:** S&P EPS outlook assumes \$80/bbl avg. oil, stable dollar, benign credit costs at banks with a Fed Funds rate cut in June and at 4.5-4.75% at 2024 end. Our profit outlook differs greatly by sector, we expect flat Financial, Energy and Auto profits, but up about 20% at mega-cap Tech firms, such as the Great Eight, with healthy 7-8% EPS growth elsewhere.
- 4700 S&P 500 target for 2024 end with a sustained near 20 trailing PE:** Our S&P target is 19.5x our 2024E EPS, supported by Treasury yields still below average since 1960, the S&P being more growth and Tech stock tilted and lower investment fees than history. Our real cost of equity estimate is 5.75% = 1.75% 10yr TIPS yield + 4% Equity Risk Premium. This supports a fair steady-state PE of 1/5.75% = 17.5. We then add a 10% premium for economic profit growth potential.
- When will the Fed cut?** Unless the recession is sooner/deeper than we expect, we think rate cuts are unlikely until June 2024 to help smother the risk of inflation reaccelerating. While we think the Fed would like to validate a soft landing with a few cuts in 2024 (like 1995), opening the door to victory over inflation cuts before the November election likely requires unemployment over 4%, a few months of sub 100K new jobs and a stock market not near all time highs. Rate cuts continuing every other meeting in 2025, as we forecast, likely requires some fiscal tightening in our view.
- Long-term interest rates rise to pre financial crisis range. What's the norm for the 2020s?:** We expect 10yr Treasury yields to be 4.2% at 2024 end with long-term inflation expectations and breakevens at about 2.5%. We estimate 10yr TIPS yields at about 1.75% at 2024 end, down from about 2% today; a bit higher than our 1.5% 10yr TIPS yield estimate going into 2023. 10yr yields overshoot our expectation to touch 5% in October 2023, but since retreated to 4.2%. The bond market expects a weak 2024 economy and further disinflation. But the basics of reasonable long-term inflation assumptions and inflation/duration risk premiums remain unsure. Moreover, the deficit remains high and the Fed will likely sell over \$1 trillion of Treasuries and MBS next year.
- How to tame inflation in 2020s? Fiscal discipline and more productivity are key:** Keeping inflation tame will be challenged by conflicts, reshoring, demographics, environmental and other regulations, also the stable but slower inertia of mature service oriented economies. This should affect real growth more than inflation if there is monetary and fiscal policy discipline; but discipline can be tough politically, so it's important to guard against inflation risks. Productivity is key to good growth and alleviating difficult policy choices. Artificial intelligence (AI) is exciting, but meaningfully boosting productivity and growth takes time. Healthcare is the biggest and fastest growing part of the U.S. economy, consumption and jobs; innovation here is crucial for productivity and growth.
- S&P sector strategy:** With disinflation and a weak macro backdrop seen ahead, we embrace less cyclical and intermediate duration assets, including investment grade credit. In equities, we seek bond substitutes (Utilities, Infrastructure) and secular trends resistant to cyclical disruptions, such as Healthcare in an aging world, productivity enhancers in a tight labor market (Tech Services, Capital Goods). We're cautious on Consumer Goods and now also many Services, but we see further rebound for advertising and airlines. We cut Financials to neutral, with a smaller overweight on big Banks and Insurance and now a small overweight on Energy. We remain overweight Health Care, Communications, Industrials and most underweight Tech and Consumer Discretionary, particularly Semiconductors and Auto. Beyond cyclical risks, car wars will continue and chip wars are likely next. We expect companies and governments to compete aggressively to ensure a place in electric vehicle and chip making and don't expect shareholder returns prioritized.
- A better relative decade likely for small vs. large caps:** Competitive U.S. corp tax rates, strong/stable dollar, normal interest rates and reshoring suggests better small vs. large cap performance.
- Keep foreign equities in the portfolio, search for value and lower correlations:** The 5 largest companies are 25% of the S&P 500, thus we value diversification. Europe & Japan are value tilted with less Tech. We keep modest exposure to China's Tech firms heavily discounted for gov't risk.
- 2024 chutes & ladders:** Negatives: Recession or <5% S&P EPS growth, destabilizing U.S. election results. Positives: S&P EPS growth >10%, 10yr Treasury yield <4% and no recession.

Contributor: Ju Wang, Portfolio Manager Equity

Global Equity Index Forecasts: 12-months			
Index	Dec 2024F	NTM EPS Growth	Target PE
S&P 500	4,700	8.5%	19.5
EuroStoxx 50	4,350	4.0%	11.9
Stoxx 600	465	4.0%	12.6
MSCI Japan	1,520	6.0%	15.2
MSCI Asia xJ	640	13.0%	13.9
MSCI EM	1,010	11.0%	13.0

S&P 500 Outlook at Yearend			
	2022	2023F	2024F
S&P 500	3840	4700	4700
Dividend Yield	1.75%	1.50%	1.60%
S&P EPS	\$222	\$223	\$242
Trailing PE	17.3	21.0	19.5
DPS	\$67	\$70	\$76

**Next 5%+ Price Move**  
(Up / **Balanced Risk** / Down)  
**Risk of 10%+ correction within 12-months**  
(Low / Moderate / **High**)

Taxable U.S. Investor Asset Allocations		
Asset Class	Long-term	Current
<b>Fixed Income/Cash</b>	<b>30-35%</b>	<b>33.5%</b>
<b>Equities</b>	<b>55-60%</b>	<b>55%</b>
US Equities	40%	36%
S&P 500	35%	34.5%
Small Caps	0-10%	1.5%
Foreign DM	10-15%	11%
Foreign EM	0-10%	8%
<b>Alternatives</b>	<b>10%</b>	<b>11.5%</b>

Key CIO Views		
Macro signal:	Dec 2023	Dec 2024F
U.S. Fed Funds rate	5.25%-5.50%	4.5%-4.75%
10yr Treasury yield	4.20%	4.20%
US IG Corp Spreads	140bp	130bp
US High Yield Spreads	420bp	450bp
Crude Oil (WTI) \$/bbl	69	88
EUR / USD FX rate	1.06	1.10

GDP Forecasts			
Region	2022	2023F	2024F
US	2.1%	2.0%	0.8%
World	3.4%	3.0%	2.8%
Euro area	3.4%	0.7%	0.7%
China	3.0%	5.2%	4.7%
Japan	1.0%	2.1%	1.0%

\* 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 12/14/2023 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. All foreign asset exposures are not FX hedged unless otherwise noted. For illustrative purposes only.

- #1 Geopolitics – Contagion or escalations?

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- #2 Inflation – Return to target?

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- #3 Central Banks – High(er) for longer?

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- #4 Growth – Recession, Stagnation, Recovery?

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- #5 China – Passing the worst?

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- #6 Artificial Intelligence – New source of growth?

## Investment Outlook 2024

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shaped by

Long-term trend disruptions

Structural shifts

Emerging mega trends

creating

**NEW OPPORTUNITIES**



## #1 Geopolitics: Elevated uncertainties weigh on sentiment

Continued tensions around China, escalation risks remain in Ukraine and Middle East

### U.S. vs. China / Taiwan

- **Strategic competition** on technology leadership, sanctions is likely to intensify
- Chinese tech sector hurt by U.S. sanctions, **tech supply chains** vulnerable to escalation
- Increased **risk of diplomatic & military** escalation (Taiwan)
- Tensions expected to continue

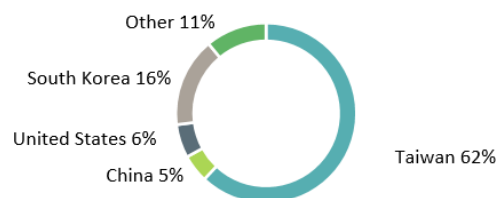
### Ukraine

- Conflict **expected to continue** with sanctions to remain in place
- Lengthy war of attrition with no side winning seems to be evolving
- **Uncertain future state** of Russia and its impact on security (nuclear centers)
- Escalation risks remain in Ukraine

### Middle East

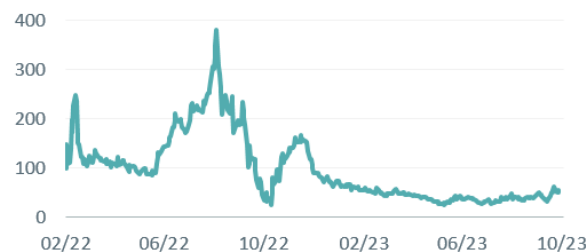
- Situation **remains tense**, with potential risk of an extended conflict
- **Risk of escalation** if Iran & U.S. would take a more active role in the conflict
- **Energy supply** a potential risk for global economy and financial markets
- Unlikely that conflict will be solved soon

Foundry manufacturing (Market share, by country)



Market shares calculated by aggregating market shares of companies by country, Source: DWS; as of 10/26/23

Gas prices in Europe (23/02/2022 = 100)



€, Source: Bloomberg Finance L.P.; as of 10/26/23

### Key economic considerations

Iran accounts for approximately **3%** of global crude oil production

Around **30%** of daily oil demand is passing the Strait of Hormuz which is in direct proximity to Iran

As many as **360** thousand Israeli reservists are leaving their jobs to mobilize for military duty

## Geopolitical tensions pose a risk to global economic activity

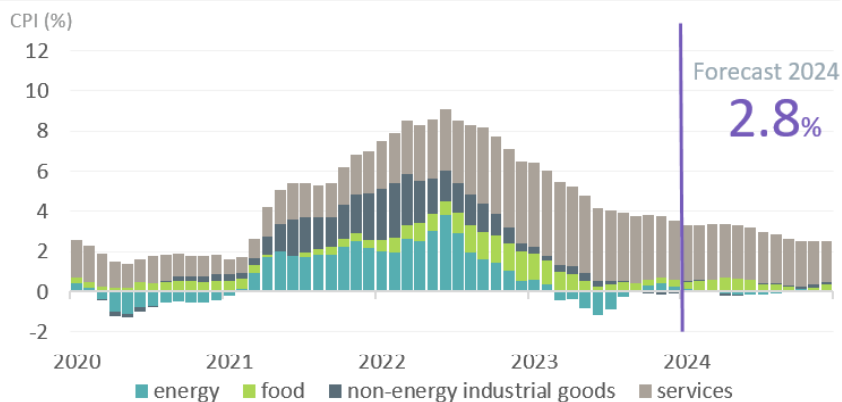
Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

Source: Bloomberg Finance, IEA, DWS Investment GmbH, as of November 2023

## #2 Inflation: Post peak, further disinflation is market consensus

Headline declining, but upside risks remain due to strong labor markets, geopolitics and possibly commodity prices

### United States

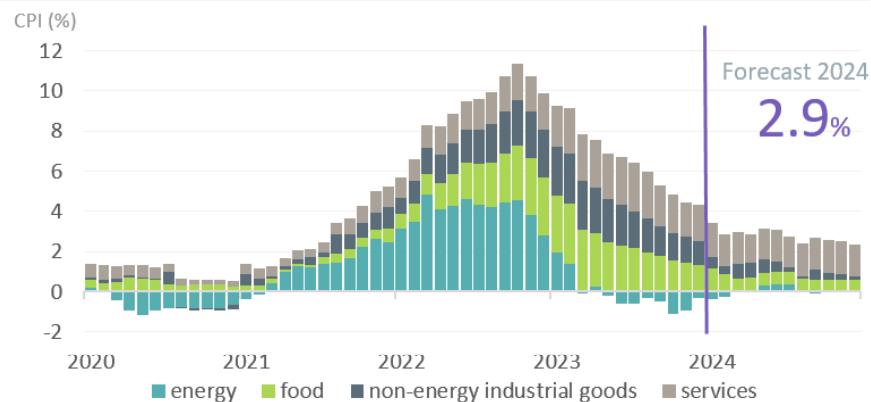


- Core inflation expected to **trend downward** from here
- Biggest question **remains labor market, energy prices & shelter**
- **Inflation expected to move sideways** with a slight downward “drift”
- Inflation rates to remain **above 2% in the medium-term**

### Structural Driver



### Eurozone



- Headline expected to fall, **core inflation might prove to be more sticky**
- **Core likely to remain above headline** for the next quarters
- A sustained return to target likely will **take time to prove**
- **Risk:** renewed rise in energy price, higher than anticipated wage growth

## Over medium-term higher inflation trend than before Covid

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Source: Bloomberg Finance, DWS Investment GmbH, as of November 2023

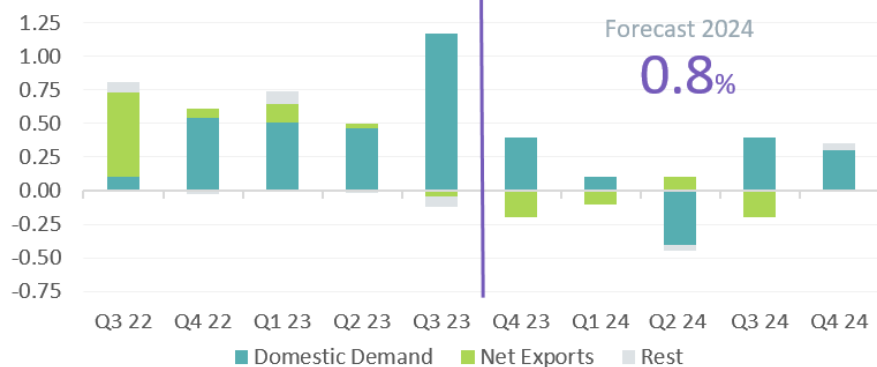


## #4 Growth: Slow recovery ahead...

In the late cycle stage - momentum is still weakening

### United States

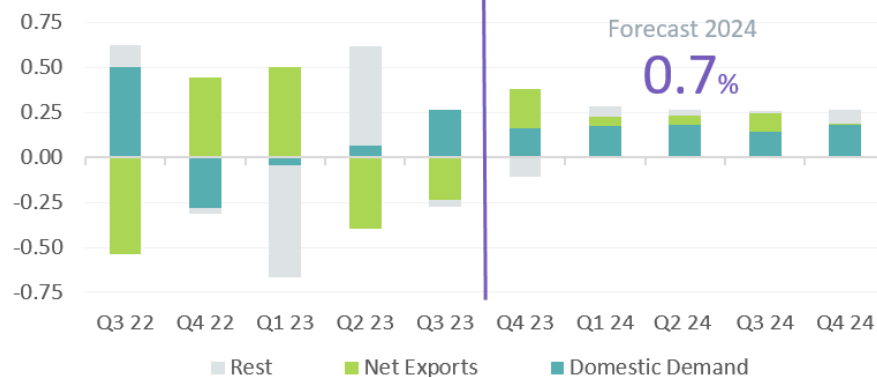
Growth contribution in %-pts



- Base case: **technical recession** – economy has not troughed yet
- Key for the short-term development remains the **labor market**
- Sharp **tightening cycle** not yet fully reflected in economic activity
- **Risk:** „No landing“ translating into delayed „hard landing“

### Europe

Growth contribution in %-pts



- Base case: **avoid recession** – single countries might experience one
- No significant labor market weakness = **no under-utilized** resources
- Rising wages + falling inflation → **support in private consumption**
- **Negative:** higher interest rates weighing on investment & construction

## Global economy leaves Covid rollercoaster behind – expect soft downturn followed by soft recovery

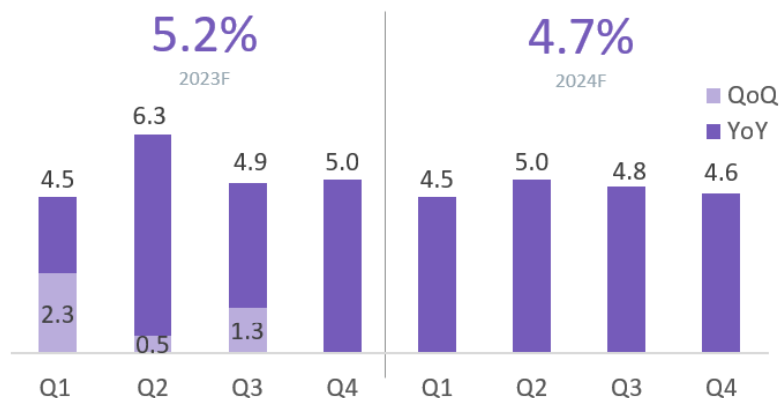
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Source: Bloomberg Finance, DWS Investment GmbH, as of November 2023

## #5 China: Bottomed out

Surprisingly strong Q3 with improved private consumption and service sector growth

### Short-term GDP growth outlook



- Post-Covid recovery developed below expectations
- Housing sector growth remains negative but seems to have bottomed
- Octobers policy meetings positive - fiscal support for Infra investing and LG
- **Risk:** sticky weakness in housing sector; political events (U.S. tech restrictions, EU case ag. Chinese car imports)

### Long-term outlook

#### Growth potential

- **Gradually declining** due to economic maturation and falling labor force
- **Positive:** ongoing urbanization: driving investment & consumption
- Higher productivity with **more factor mobility:** relaxation of hukou restriction
- Most important: **rising productivity** by pushing technological upgrades
- Trade with the U.S. is coming back but China was able to compensate (via EMs)

#### Risk: Local Government (LG) Debt

- Special-purpose investment companies set up by LG for infrastructure projects
- Root of problem is revenue/spending mismatch since the early 90ies
- LG expenditures increased significantly during the pandemic & the current crisis
- Funding mainly generated by land sales but as sales becoming less, funding stalls

## Major challenges, but structural strengths and adaptability should not be underestimated

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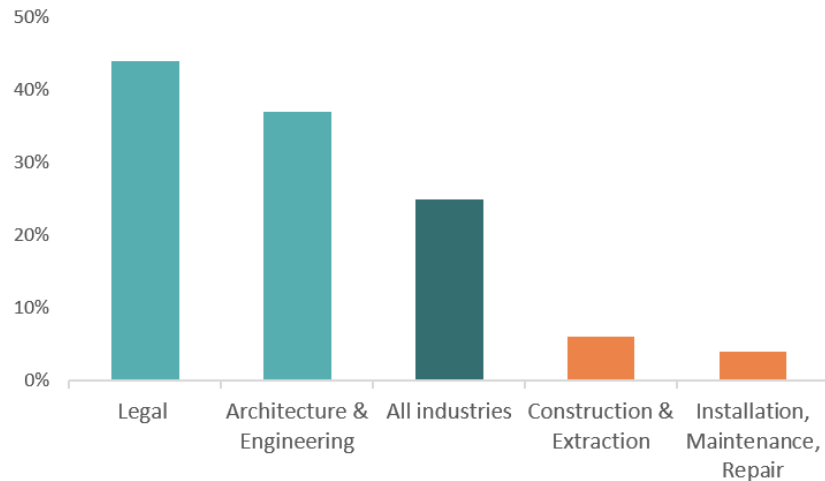
Source: Bloomberg Finance, DWS Investment GmbH, as of November 2023

## #6 Artificial Intelligence: an innovation at the right time

### Unveiling the power and potential of AI

#### The job market perspective

Industry employment exposed to AI in the U.S.



— “Indoor jobs” much more exposed than “outdoor jobs”

#### View

##### General overview

- There is a **shift from digitalization to quantification** of the economy
- AI able to put together existing parts, while lagging to create something new
- **Risk:** AI-Hallucination - plausible-sounding falsehoods in AI-generated content
- **Question:** How fast can AI be adapted & how much will it boost productivity

##### Potential economic impact

- After an **adoption phase** AI might have the ability to be a boost to productivity
- All countries to see GDP boost through AI - China is the largest relative winner
- Economic gains for all sectors - Healthcare to profit most due to personalization
- AI to support sustainability e.g. through energy management & climate modeling
- **Challenges ahead:** Data privacy, Regulation, Ethics

## AI applications are in the transition from a “playground” to becoming true productivity boosters

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

Sources: Goldman Sachs, DWS Investment GmbH, as of November 2023



## Overview of strategic forecasts

### Overview of strategic forecasts: US

#### Macro



GDP\*

#### Anticipating a soft recession into 2024 as financial conditions tighten

We expect a slow down as base case as unemployment crosses 4% and wages and core inflation cool slowly. We expect growth to grind back by end 2025.



Inflation\*

#### Inflation to decline further but this might be a slow process and setbacks are likely

We expect core inflation to cool slowly and flag a risk to the upside. For headline inflation, non-durables (i.e. energy prices) remain a wildcard.



Monetary Policy

#### Fed expected to be on hold in near term

Fed funds rate expected to be on hold at 5.25-5.50%, with slight risk to the upside. We forecast one rate cut each quarter in 2024, starting in June meeting.

'23   '24
2.3%   0.8%
4.2%   2.8%
Q3 '24
4.50%
4.75%

#### RISKS



**Financial stability:** Risks to financial stability (banks, regulation, CRE) from higher rates as stronger economic momentum may lead to more stubborn or increasing inflation, forcing the Fed to hike rates even further. Policy choice risk to the upside as Fed wants to err on the hawkish side.

Geo-political shocks such as ongoing conflicts in Eastern Europe and Israel-Hamas are another risk to be aware of.

#### Asset classes



Fixed Income

#### Curve is expected to steepen further led by the front end

**U.S. IG:** We expect tighter levels in 12 months based on rating stability, fundamental strength, global demand.



Currencies

#### We expect the USD to stay strong vs. the EUR

**EUR/USD:** U.S. economic outlook is less weak than in Eurozone; high yields to encourage capital inflows.



Equity

#### High bond yields to keep S&P 500 below 5,000 in the next year

**S&P 500:** Communications, healthcare and IT to have double-digit EPS growth.



Commodities

#### Commodity prices to increase over the next 12 months

**Oil:** Expect oversupply in near term and undersupply by end of 2024

**Gold:** Prices will be supported by central bank purchases through 2024.



Real Estate & Infrastructure\*\*

**Real Estate:** U.S. is expected to underperform Europe in 2023/24 with price correction coming later. Logistics and residential remain top performers.

**Infrastructure:** We see signs that investor appetite is returning as market confidence increases.

Q3 '24
4.20%
10y UST
105bps
US IG
1.10
EUR/USD
4,700
S&P 500
88\$
Oil
2,250\$
Gold
0.00%
Non-listed U.S. RE
10.80%
Non-listed Global Infra

\*GDP & inflation forecasts are Y/Y averages (Y/Y Q4/Q4 GDP growth is expected at 2.5% in 2023 & 0.2% in 2024; Y/Y Dec/Dec core inflation at 3.4% in 2023 & 2.3% in 2024) \*\*Real Estate and Infrastructure forecasts are expected 12m total return. Past performance is not indicative of future returns. DWS expectations/forecast as of November 15, 2023. // 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.

Source: Bloomberg Finance L.P., DWS Investment GmbH as of December 04, 2023

## Overview of strategic forecasts

### Overview of strategic forecasts: ex-US

#### Macro



##### GDP

**EUZ:** Economic activity is coming down  
**China:** Cyclical bottom passed, housing sector stabilizing on low levels, more frontloaded policy support.  
**EM:** China stabilizing but higher U.S. rates, higher oil prices present new headwinds



##### Inflation

**EUZ:** Headline numbers coming down but core rates remain sticky.  
**UK:** Headline inflation to moderate but core rate much stickier than expected.  
**Japan:** CPI and core CPI likely to moderate over the coming months.



##### Monetary Policy

**ECB:** On hold for the next months. We are expecting three rate cuts 2024 as the inflation outlook improves.  
**BoE:** We expect rates to be higher for longer due to the ongoing wage pressures.

#### RISKS



**EUZ:** Rising interest rates could have more severe impact. Less demand from China and/or U.S. could further weaken the economy. Energy problems could re-emerge.  
**UK:** As wage growth continues to surprise to the upside, the risk of a re-acceleration of price dynamics is not yet banished, while economic momentum continues to be weak.  
**Emerging Markets:** New upside risks for inflation in Emerging Markets could come from central banks having less scope to ease as higher global rates and strong dollar are exerting downside pressure on EM FX.

'23	'24
0.7%	10.7%
5.2%	14.7%
4.0%	14.1%
5.7%	12.9%
7.3%	12.8%
3.2%	12.3%
Q3 '24	
3.25%*	
4.75%	

#### Asset classes



##### Fixed Income

**10y Bunds:** Expect bull steepening of curve as ECB stopped hiking. Cuts in mid-2024 should lead to moderate additional steepening.

**EUR IG:** Persistently higher rates environment is attracting new flows which should support credit spreads.

**GBP/USD:** Inflation is still a threat, thus BoE expected to stay hawkish for longer.

**USD/JPY:** JPY to remain weak as long as Japanese investors are looking for yield outside of Japan.



##### Currencies

**Germany:** Attractive valuation, supply chains are improving  
**MSCI EM:** Chinese real-estate and debt problems a drag on earnings and multiple.



##### Equity

**Higher rates for longer pricing into valuations with a 6- to 12-month lag relative to listed markets.**

Fundamentals are sound, though. Housing shortages in most major markets and construction is falling.



##### Real Estate\*\*

**Sector remains attractive especially the European opportunities due to greater volume of good value assets.**

Market remains subdued in comparison to 2022 but significant secular tailwinds thanks to strategic European policymaking



##### Infrastructure\*\*

Q3 '24
2.70%
10y Bunds
110 <sub>bps</sub>
EUR IG
1.27
GBP/USD
146
USD/JPY
16,600
DAX
1010
MSCI EM

5.00%  
Non-Listed  
European RE

10.80%  
Non-listed  
global Infra

\* Deposit rate // Forecasts are not a reliable indicator of future returns. \*\*Real Estate and Infrastructure forecasts are expected 12m total return. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. DWS expectations/forecasts (F) as of November 15, 2023.

Source: Bloomberg Finance L.P., DWS Investment GmbH as of December 04, 2023

DWS Investment GmbH strategic forecasts across asset classes

	Current level Nov 30, 2023*	Strategic Forecast Dec 2024	Expected Total Return		Current level Nov 30, 2023*	Strategic Forecast Dec 2024	Expected Total Return
<b>Capital market yields (sovereign bonds)</b>				<b>Equity markets (index value in points)</b>			
United States (2-year)	4.68%	3.95%	5.03%	United States (S&P 500)	4,568	4,700	4.59%
United States (10-year)	4.33%	4.20%	5.78%	Germany (DAX)****	16,215	16,600	2.37%
United States (30-year)	4.49%	4.45%	5.32%	Eurozone (Euro Stoxx 50)	4,382	4,400	4.10%
Municipals**	2.02%	2.25%	7.59%	Europe (Stoxx600)	462	465	4.43%
Securitized / MBS**	178 bp	120 bp	5.65%	Japan (M S CI Japan)	1457	1,520	6.64%
Germany (2-year)	2.82%	2.50%	2.60%	Switzerland (SMI)	10,854	10,700	1.88%
Germany (10-year)	2.45%	2.70%	1.49%	United Kingdom (FT SE 100)	7,454	7,400	3.78%
Germany (30-year)	2.69%	3.00%	-3.10%	Emerging Markets (M S CI EM)	987	1,010	5.2%
Italy (10-year)	178 bp	220 bp	0.37%	Asia exJapan (M S CI AC Asia exJapan)	621	640	5.70%
Spain (10-year)	102.4 bp	100 bp	2.74%	Australia (M S CI Australia)	1418	1,400	3.16%
United Kingdom (10-year)	4.18%	4.20%	4.79%	<b>Benchmark rates in percent</b>			
Japan (2-year)	0.03%	0.35%	-0.18%	United States (federal funds rate)***	5.25-5.50	4.50-4.75	-
Japan (10-year)	0.67%	1.15%	-2.64%	Eurozone (depo sit rate)	4.00	3.25	-
<b>Currencies</b>				United Kingdom (repo rate)	5.25	4.75	-
EUR vs USD	109	1.10	-0.55%	Japan (po licy rate)	-0.10	0.25	-
USD vs JPY	148	146	3.56%	<b>Commodities in U.S. dollars</b>			
EUR vs JPY	161	161	3.24%	Gold (Spot price)	2,037	2,250	
EUR vs GBP	0.86	0.87	-0.79%	Gold (Future price)	2,149	2,250	4.68%
GBP vs USD	126	1.27	0.68%	Crude Oil (Brent Spot price)	83	88	
USD vs CNY	7.14	7.35	5.69%	Crude Oil (Brent Future price)	78	88	13.1%
<b>Spreads (corporate &amp; EM bonds) in bps*****</b>				<b>Real Estate / Infrastructure</b>			
EUR IG Corp	153	110 bp	5.98%	Listed US RE			5.00%
EUR HY	478	450 bp	6.92%	Non-Listed US RE			0.00%
US IG Corp	97	105 bp	6.11%	Listed Global RE			4.50%
US HY	370	450 bp	5.54%	Non-Listed Global RE			4.00%
Asia Credit	268	280 bp	8.66%	Listed Infrastructure			5.00%
EM Credit	327	325 bp	9.24%	Non-Listed Infrastructure			10.80%
EM Sovereign	405	440 bp	6.09%				

Alternative investment may be speculative and involve significant risks including illiquidity, heightened potential for loss and lack of transparency. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect. No assurance can be given that any forecast or target will be achieved. DWS expectations/forecasts as of November 15, 2023 // \*current value is based on last trading data // \*\* Municipals: High yield OAS; Securitized/ MBS: FNMA 30y - 7y U.S. Treasuries; \*\*\*Federal funds rate // \*\*\*\*DAX is a Total Return Index, no dividend yield added // \*\*\*\*\* yield spreads are quoted in terms of one yield versus that of U.S. Treasuries, except EUR IG and EUR HY which are quoted against Bunds // Source: Bloomberg Finance L.P., DWS Investment GmbH as of December 04, 2023

**GDP Growth Rate**

% year-on-year

	2022	2023F	2024F	Consensus 2023 (BBG)
World	3.5	3.0 (2.9)	2.8 (2.7)	2.6 (2.1)
U.S.*	2.1	2.3 (2.0)	0.8 (0.4)	2.2 (1.6)
EUZ	3.4	0.7 (0.8)	0.7 (0.9)	0.6
GER	1.9	-0.1 (0.0)	0.9 (1.0)	-0.3 (0.0)
UK	4.1	0.5 (0.3)	0.6 (0.7)	0.3 (-0.2)
Japan	1.0	2.1 (2.1)	1.0 (1.1)	1.3 (1.0)
China	3.0	5.2 (4.8)	4.7 (4.5)	5.2 (5.6)

**Inflation (CPI)**

% year-on-year average

	2022	2023F	2024F	Consensus 2023 (BBG)
World				5.5 (5.3)
U.S.**	8.0	4.2 (4.1)	2.8 (2.6)	4.2 (4.1)
EUZ	8.4	5.7	2.9 (2.5)	5.5
GER	8.6	6.0	3.2	6.0 (6.2)
UK	9.1	7.3 (7.4)	2.8 (2.6)	7.5 (6.6)
Japan	2.5	3.2 (2.9)	2.3 (1.9)	2.9
China	2.0	0.5	1.8 (2.0)	0.8 (2.1)

**Unemployment Rate (Annual average)**

%

	2022	2023F	2024F	Consensus 2023 (BBG)
U.S.	3.5	3.9	4.3	3.7
EUZ	6.7	6.5 (6.6)	6.5 (6.7)	6.6 (6.9)
GER	5.3	5.7 (5.6)	5.7 (5.3)	5.6
UK	3.7	4.2 (4.0)	4.5 (4.5)	4.1 (4.2)
Japan	2.6	2.6 (2.5)	2.4 (2.4)	2.5
China***	5.5	5.0 (5.3)	5.0 (5.1)	5.2 (4.1)

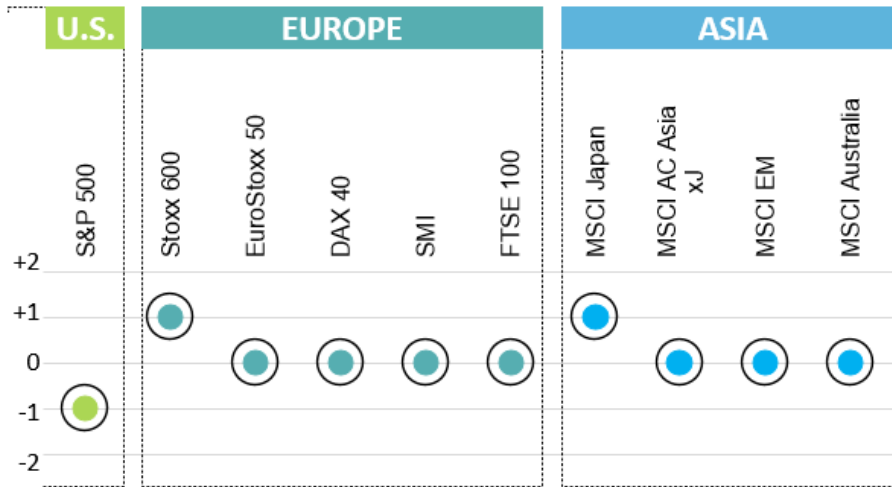
**Fiscal Balance**

% of GDP

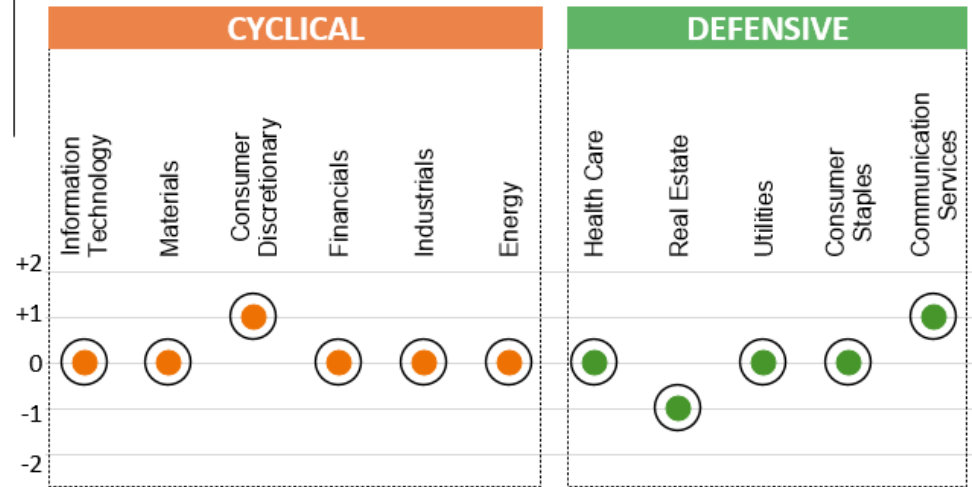
	2022	2023F	2024F	Consensus 2023 (BBG)
U.S.	-5.4	-6.0 (-5.6)	-6.0 (-5.6)	-6.1 (-5.7)
EUZ	-3.6	-2.9 (-3.2)	-2.7	-3.4 (-3.6)
GER	-2.6	-1.9 (-1.2)	-1.2	-2.3 (-2.8)
UK	-6.3	-5.2 (-5.8)	-4.5 (-5.3)	-5.2 (-5.3)
Japan	-7.8	-6.0 (-6.0)	-4.5 (-4.5)	-5.5
China****	-7.5	-7.4 (-6.9)	-7.2 (-6.4)	-5.5 (-5.0)

Source: DWS Macro Research. (\*) For the U.S., GDP growth Q4/Q4 % is 2.4% in 2023 and 0.4% in 2023, (\*\*) Measure is CPI, other measures see US part of the presentation, (\*\*\*) Urban unemployment rate (end of period), not comparable to consensus data, (\*\*\*\*) China fiscal deficit refers to IMF fiscal monitor, October 2023 plus most recent published new government support measures. As of October 2023.

**Regional view\***



**Sector view\***



**U.S.**

– We see little upside to equities as the fight with inflation isn't over, the 5.5% Fed rate is likely to linger; high bond yields & unsustainable PE multiples of 18x and flattish S&P EPS are further limiting factors.



**EUROPE**

– Remains attractively priced and is on a record discount to the U.S.  
– Early indicators, however, remain cloudy and the Q3 reporting season has been mixed so far.



**ASIA**

– We remain neutral on Emerging Market equities as “no China, no party” still holds true. Chinese economic data is stabilizing at a low base but is not showing much sign of further recovery. Cheap valuations are not supportive either but rather a value trap.

**Two key calls**

**Growth call: Communications & Consumer Discretionary sector:** Communications sector with AI exposure, reasonable valuations and teens EPS growth; Discretionary consumption supported by robust labor markets

**Value call: European equities:** "Value within Value"- Stoxx discount to S&P still too high, SMID caps even more. However: better global GDP required as trigger

Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect. No assurance can be given that any forecast or target will be achieved. DWS expectations/forecasts as of November 15, 2023 // \*Our tactical view: +2/+1 – Overweight, 0 – Neutral, -1/-2 – Underweight // ● = T; ○ = T-1

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

Sources: Bloomberg Finance LP, DWS Investment GmbH, as of December 2023

**Focus on light at the end of tunnel**



**U.S.:** We adjust growth path on incoming data but hold on to a soft recession into 2024. We expect flattish S&P EPS of \$220 in 2023, \$235 in 2024 as we expect consumption to weaken looking ahead as tailwinds (strong wage growth, excess savings) are largely gone in the U.S. The S&P PE is slightly above its fair steady-state 18x, essentially the highest growth premium or optimism since 1999. With respect to valuation, we expect US bond yields (our forecast US10y 4.2%) to cap the trailing-PE just below 20x for the S&P. Our S&P 500 target therefore is 4700 and target of 5,000 is out of reach.

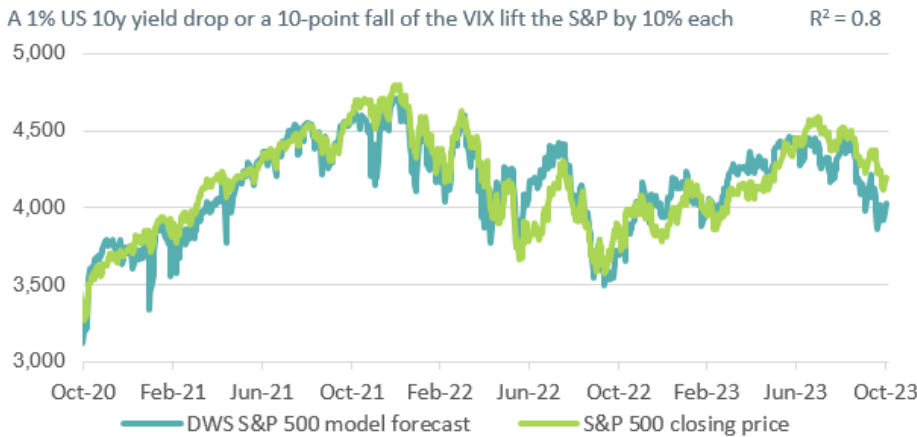


**Europe:** Equity investors have started to focus on the “light at the end of the tunnel,” as the prospects of falling central bank rates could start a moderate GDP re-acceleration from H2 2024 in Europe. European earnings have rebounded over the last two years; earnings growth gap between US and European market is expected to narrow and be much lower than last decade. However, the narrowing earnings growth gap is yet to be reflected in valuations as Europe trades at multiple-decade high discount to the US, both when considering the Stoxx 600 vs. the S&P 500 and the S&P 500 Value. We forecast mid-single-digit total returns for European equities until end of 2024.

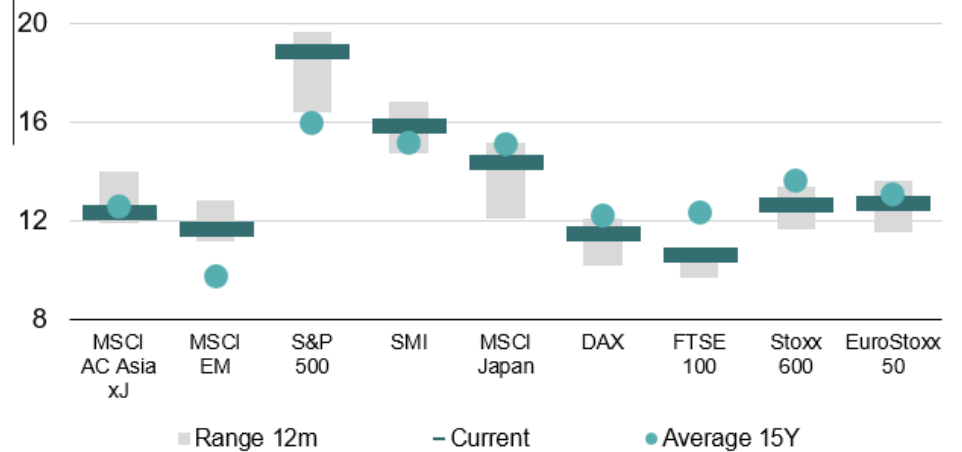


**EM:** Chinese economic data keeps on disappointing: piecemeal approach by authorities to invigorate consumption fall short of domestic & international expectations and leave investors puzzled. Cheap valuations are not a support, but rather a value trap as long as investors are pulling money out of shares / GEM-ex China discussion lingers on. Consumer-/tech names preferred exposure. **India:** higher oil price not a stumbling block and elections locally expected to deliver a market friendly outcome – India stays attractive top down, being the second largest market in GEM index now.

**S&P 500 explained by EPS, 10y UST and VIX\***



**Price-earnings ratio (12 months, forward)**



**S&P Forecast:**  $PE \times EPS = [23.7 + (-0.15 \times VIX) + (-1.23 \times 10y \text{ yield})] \times [EPS \text{ N24M}]$

The information herein reflects our current views only, are subject to change, and are not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect. No assurance can be given that any forecast or target will be achieved. DWS expectations/forecasts as of November 15, 2023. //

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

Sources: Factset, Bloomberg Finance LP, DWS Investment GmbH, as of December 2023

## DWS Americas CIO View

DWS Investment GmbH Forecasts: US GDP, inflation, fed funds rate, unemployment rate, federal debt and deficit

	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
GDP (%qq, annualized)	2.2	2.1	5.3	0.8	0.0	-1.0	0.8	1.0
GDP (%yy)	1.7	2.4	3.0	2.5	2.0	1.2	0.1	0.2
GDP (%qq)	0.6	0.5	1.3	0.2	0.0	-0.3	0.2	0.3
Unemployment Rate % (EOP)	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.3
PCE (EOP)	4.4	3.2	3.4	3.3	3.2	2.8	2.6	2.5
Core PCE (EOP)	4.8	4.3	3.7	3.4	3.2	2.6	2.4	2.3
Fiscal balance (% GDP)				-6.0				-6.0
FFR (EOP)	4.75 - 5	5 - 5.25	5.25 - 5.5	5.25 - 5.5	5.25 - 5.5	5 - 5.25	4.75 - 5	4.5 - 4.75

Key-Forecasts		2023			2024			2025
		New	chng.	Old	New	chng.	Old	New
Growth	average	2.3%	0.3%	2.0%	0.8%	0.4%	0.4%	1.2%
	Y/Y Q4/Q4	2.5%	1.1%	1.4%	0.2%	-0.3%	0.5%	1.7%
PCE Price Index	average	3.9%	0.1%	3.8%	2.8%	0.3%	2.6%	2.2%
	Y/Y dec/dec	3.3%	0.0%	3.3%	2.5%	0.2%	2.3%	2.1%
Core PCE Price Index	average	4.2%	0.1%	4.1%	2.8%	0.1%	2.7%	2.2%
	Y/Y dec/dec	3.4%	-0.1%	3.5%	2.3%	-0.1%	2.4%	2.2%
Headline CPI	average	4.2%	0.1%	4.1%	2.8%	0.3%	2.6%	2.3%
	Y/Y dec/dec	3.4%	0.1%	3.3%	2.5%	0.2%	2.3%	2.3%
Fed Funds Rate	lower	5.25	0.00	5.25	4.50	0.00	4.50	3.75
	upper	5.50		5.50	4.75		4.75	4.00
Unemployment Rate	EOP	3.9	-0.2	4.1	4.3	-0.1	4.4	4.1
Fiscal Deficit	EOP	-6.0	-0.4	-5.6	-6.0	-0.4	-5.6	-6.0

Source: DWS Investment GmbH as of December 2023. Past performance may not be indicative of future results.

DWS Investment GmbH S&P 500 Annual EPS Outlook

	2014A	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	y/y	Bottom-up Consensus (IBES)				DWS View				Normalized 2024		
											2023E	y/y	2024E	y/y	2023E	y/y	2024E	y/y	(\$)	% of 2023	
<b>S&amp;P 500 EPS</b> (historical index)	<b>\$118.82</b>	<b>\$117.46</b>	<b>\$118.10</b>	<b>\$132.00</b>	<b>\$161.93</b>	<b>\$162.93</b>	<b>\$139.72</b>	<b>\$208.12</b>	<b>\$218.09</b>	<b>4.8%</b>											
<b>S&amp;P 500 EPS</b> (current constituents)	<b>\$116.70</b>	<b>\$117.17</b>	<b>\$117.41</b>	<b>\$129.32</b>	<b>\$155.41</b>	<b>\$161.17</b>	<b>\$143.29</b>	<b>\$208.02</b>	<b>\$219.41</b>	<b>4.4%</b>	\$223	1.6%	\$248	11.3%	\$223	1.6%	\$242	8.5%	\$240	99%	
<b>Sector (\$ bn)</b>																					
Communication Services	67.4	77.8	90.6	98.8	123.4	129.8	135.0	187.4	146.9	-21.6%	181.4	23.5%	208.9	15.2%	181.0	23.2%	205.0	13.3%	203.1	99%	
Consumer Discretionary	58.4	68.7	76.6	80.6	95.6	93.6	64.6	124.2	111.5	-10.2%	155.6	39.6%	172.9	11.1%	156.2	40.1%	165.0	5.7%	166.2	101%	
Consumer Staples	83.9	82.7	85.4	89.7	96.8	97.9	105.2	117.8	119.5	1.5%	123.1	3.0%	130.0	5.6%	122.6	2.6%	128.0	4.4%	125.7	98%	
Energy	94.3	39.4	10.5	37.1	69.8	49.4	-6.1	79.2	200.5	153.3%	149.6	-25.4%	154.3	3.2%	148.5	-25.9%	152.5	2.7%	137.8	90%	
Financials	184.1	199.6	203.7	213.2	262.7	276.6	225.5	363.2	308.5	-15.1%	342.9	11.2%	363.8	6.1%	343.0	11.2%	349.5	1.9%	339.2	97%	
Health Care	136.7	151.7	156.5	170.8	187.5	205.5	225.7	293.4	307.9	5.0%	245.7	-20.2%	293.4	19.4%	245.5	-20.3%	288.0	17.3%	284.7	99%	
Industrials	100.5	103.9	98.3	107.2	130.5	125.1	66.9	112.0	141.1	26.0%	158.8	12.5%	176.4	11.1%	158.0	12.0%	171.0	8.2%	172.6	101%	
Information Technology	162.6	168.2	176.5	208.0	239.7	233.4	264.7	345.8	354.8	2.6%	374.2	5.5%	436.8	16.7%	370.5	4.4%	430.0	16.1%	443.3	103%	
Materials	24.8	23.8	22.9	28.9	36.4	34.3	32.5	61.4	64.0	4.2%	49.6	-22.5%	50.9	2.5%	49.5	-22.7%	49.9	0.8%	48.6	97%	
Real Estate	22.6	25.8	28.5	32.1	35.8	37.3	37.3	44.5	51.8	16.4%	51.5	-0.5%	53.3	3.4%	50.5	-2.5%	51.5	2.1%	49.8	97%	
Utilities	32.9	33.0	35.6	37.0	40.8	44.8	46.8	49.3	50.8	2.9%	54.0	6.5%	58.4	8.1%	53.5	5.3%	57.2	6.9%	59.1	103%	
<b>S&amp;P 500</b>	<b>968.3</b>	<b>974.8</b>	<b>985.0</b>	<b>1103.4</b>	<b>1319.0</b>	<b>1327.8</b>	<b>1198.1</b>	<b>1778.1</b>	<b>1857.2</b>	<b>4.4%</b>	<b>1886.3</b>	<b>1.6%</b>	<b>2099.0</b>	<b>11.3%</b>	<b>1878.7</b>	<b>1.2%</b>	<b>2047.6</b>	<b>9.0%</b>	<b>2030.1</b>	<b>99%</b>	
S&P ex. Energy (\$bn)	874.0	935.4	974.6	1066.3	1249.2	1278.4	1204.2	1698.9	1656.7	-2.5%	1736.7	4.8%	1944.7	12.0%	1730.2	4.4%	1895.1	9.5%	1892.3	100%	
S&P ex. Tech (\$bn)	805.7	806.6	808.5	895.4	1079.4	1094.4	933.4	1432.3	1502.5	4.9%	1512.1	0.6%	1662.2	9.9%	1508.2	0.4%	1617.6	7.3%	1586.8	98%	
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	11.9%											
S&P 500 Non-GAAP Net Margin	10.2%	10.4%	10.3%	10.7%	12.1%	11.5%	10.3%	13.3%	12.4%												

S&P 500 EPS	Year	1Q	2Q	3Q	4Q
<b>2019A</b>	<b>163</b>	39	41	41	42
<b>2020A</b>	<b>140</b>	33	28	38	42
<b>2021A</b>	<b>210</b>	49	53	54	54
<b>2022A</b>	<b>222</b>	55	58	56	53
<b>2023E</b>	<b>223</b>	53	54	58	58
<b>2024E</b>	<b>242</b>	57	59	62	64

S&P 500 EPS historical constituents represents the earnings per share (EPS) of S&P 500 index constituents at the time, while S&P 500 EPS current constituents represents the earnings per share of index constituents as of the date the data was compiled 9/30/2023.

Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

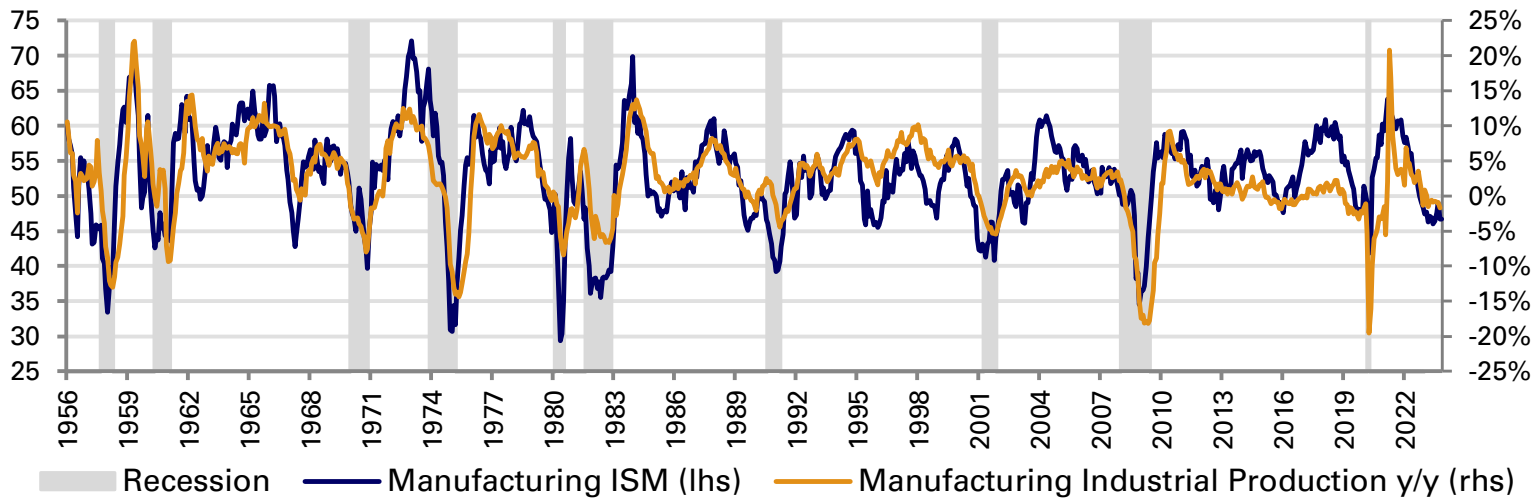


**Indices for the manufacturing industry\***

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
U.S.	50.0	49.0	48.4	47.4	47.7	46.3	47.1	46.9	46.0	46.4	47.6	49.0	46.7
Germany	45.1	46.2	47.1	47.3	46.3	44.7	44.5	43.2	40.6	38.8	39.1	39.6	42.6
France	47.2	48.3	49.2	50.5	47.4	47.3	45.6	45.7	46.0	45.1	46.0	44.2	42.9
Italy	46.5	48.4	48.5	50.4	52.0	51.1	46.8	45.9	43.8	44.5	45.4	46.8	44.4
UK	46.2	46.5	45.3	47.0	49.3	47.9	47.8	47.1	46.5	45.3	43.0	44.3	47.2
Sweden	47.0	45.6	45.8	46.6	47.2	45.4	45.8	40.9	45.0	48.0	46.0	43.5	49.0
Japan	50.7	49.0	48.9	48.9	47.7	49.2	49.5	50.6	49.8	49.6	49.6	48.5	48.3
Singapore	49.7	49.8	49.7	49.8	50.0	49.9	49.7	49.5	49.7	49.8	49.9	50.1	50.3
Taiwan	41.5	41.6	44.6	44.3	49.0	48.6	47.1	44.3	44.8	44.1	44.3	46.4	48.3
South Korea	48.2	49.0	48.2	48.5	48.5	47.6	48.1	48.4	47.8	49.4	48.9	49.9	50.0
China (HSBC)	49.2	49.4	49.0	49.2	51.6	50.0	49.5	50.9	50.5	49.2	51.0	50.6	50.7
India	55.3	55.7	57.8	55.4	55.3	56.4	57.2	58.7	57.8	57.7	58.6	57.5	56.0
Brazil	50.8	44.3	44.2	47.5	49.2	47.0	44.3	47.1	46.6	47.8	50.1	49.0	49.4
Global													
Manufacturing Ind.	49.4	48.8	48.7	49.1	49.9	49.6	49.6	49.5	48.7	48.6	49.0	49.2	49.3
Non-manufacturing	49.1	48.1	48.0	50.0	52.5	54.3	55.3	55.3	53.8	52.6	51.0	50.7	50.4
Global Composite	49.0	48.0	48.2	49.7	52.1	53.3	54.1	54.3	52.6	51.6	50.6	50.5	50.0

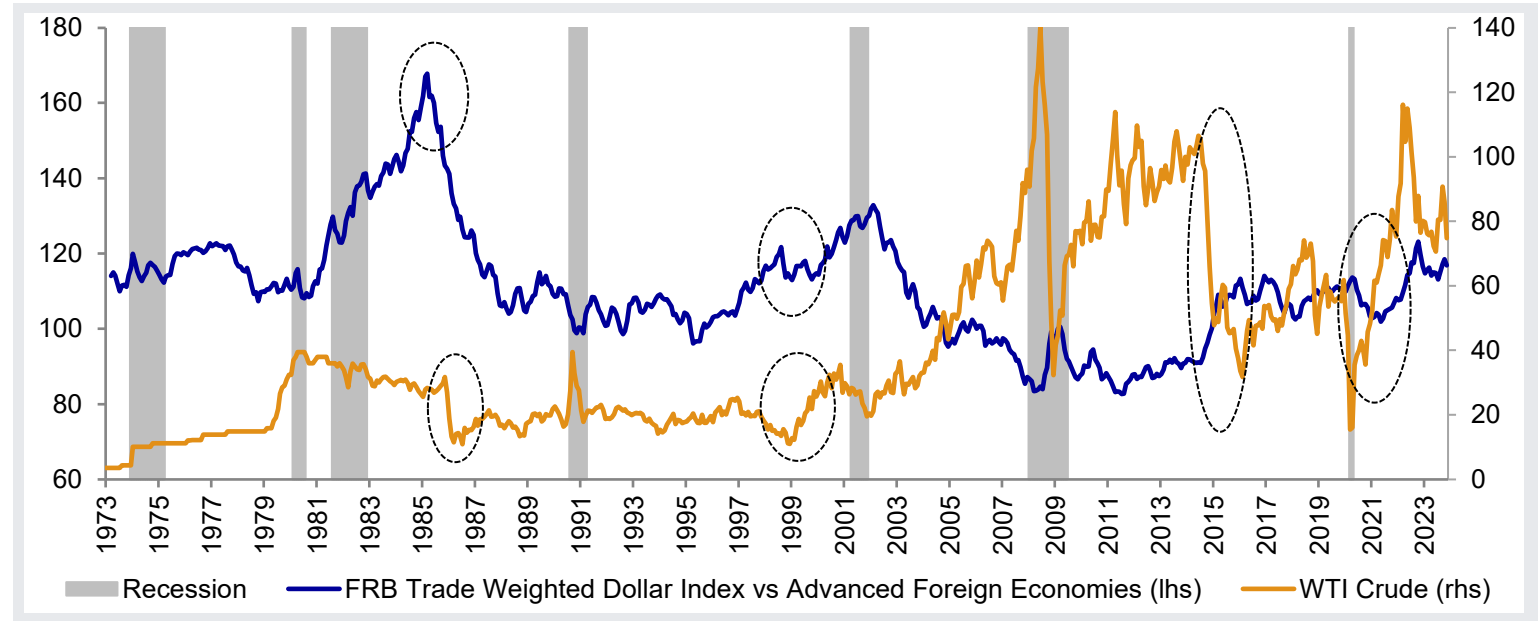
Note: Values above 50 indicate an improving business development of the industry compared to the previous month, values below 50 indicate shrinking businesses  
 Sources: Bloomberg Finance LP, DWS Investment GmbH; as of December 2023

Manufacturing ISM vs. Manufacturing Industrial Production y/y



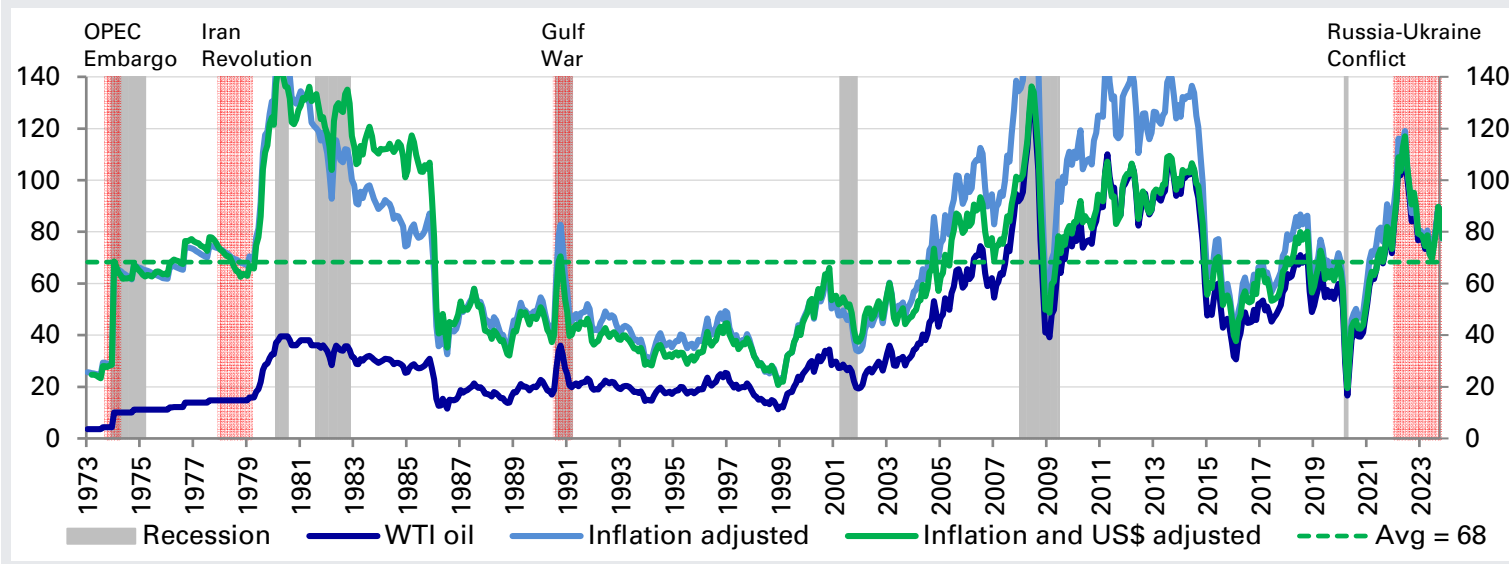
Source: ISM, FRB, Haver, DWS Investment GmbH as of 12/6/2023

WTI oil price vs. US Dollar Index



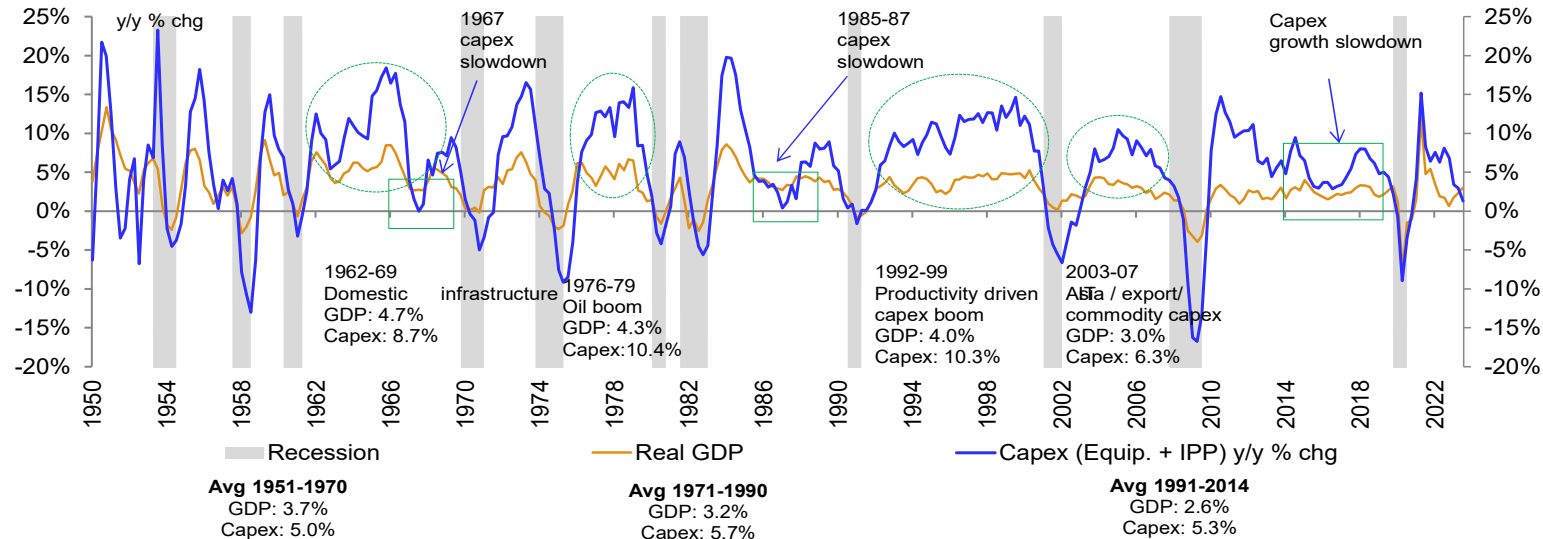
Source: Haver, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results

### WTI oil price adjusted for inflation and US Dollar



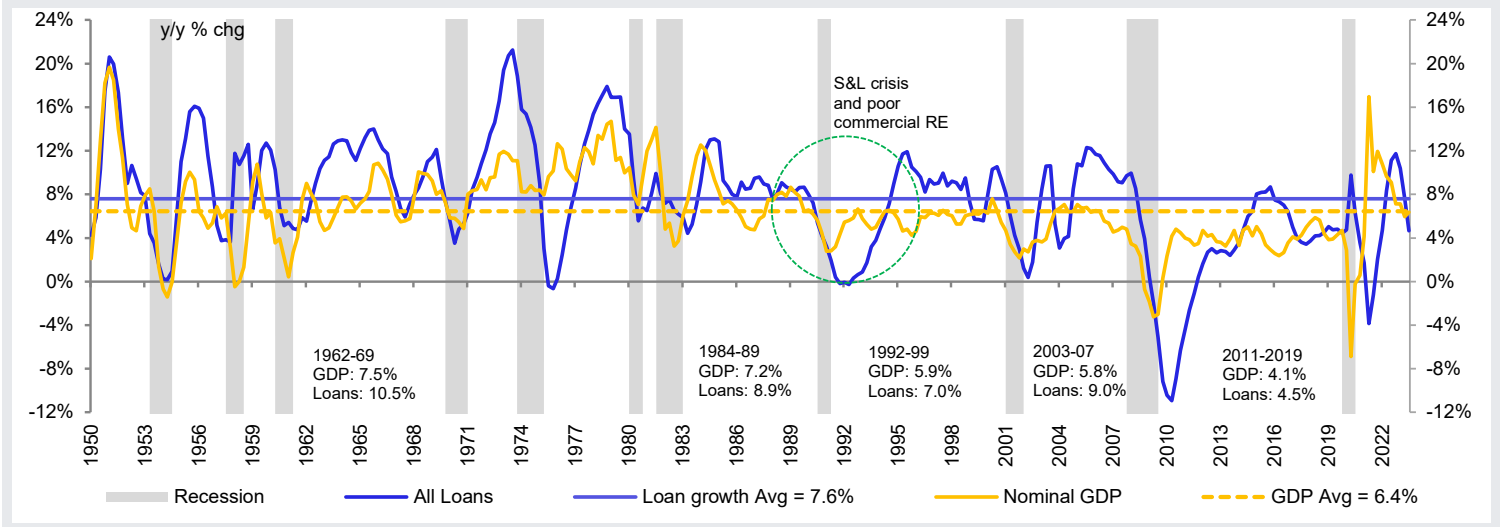
Source: Haver, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results

### U.S. GDP and capex growth



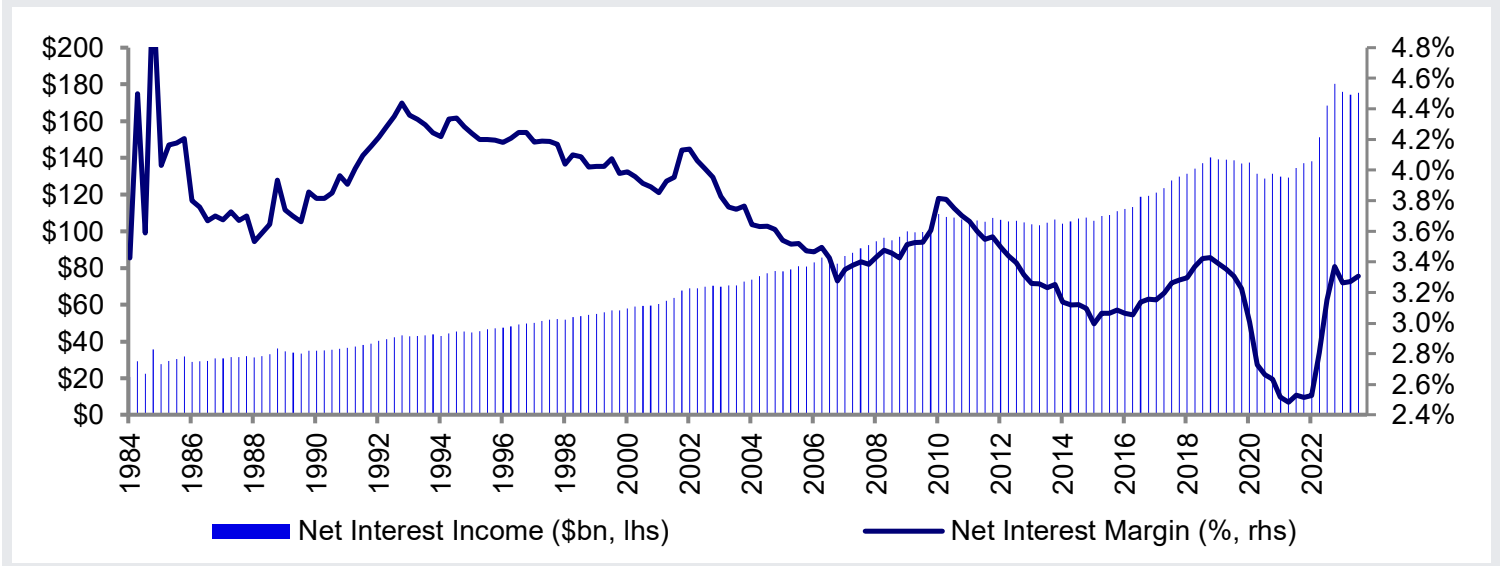
Source: Haver, DWS Investment GmbH as of 3Q2023

### FDIC banks: Loan growth



Sources: Haver, DWS Investment GmbH as of 3Q 2023

### FDIC banks: Net interest income and margin



Sources: Haver, DWS Investment GmbH as of 3Q 2023

DWS equity index target by region: Constructive equity outlook 2024, focusing on the light at the end of the tunnel

Index	3M relative View	Current Level	Previous Target CIO Day Sep	Target Dec 24	Chg in Target	Expected Total Return Dec 24	----- thereof -----			Assumptions				
		16/11/2023					EPS growth NTM†	LTM multiple impact	Dividend Yield	EPS NTM* (e)	DWS vs. Cons.	Target LTM P/E in Dec 24	Target PE discount to US	
S&P 500		4,503	4,500	4,700	4%	6.0%	USD	10.0%	-6%	1.7%	242	-1.5%	19.3x	
Stoxx 600		465	470	465	-1%	6.0%	EUR	4.0%	-2%	3.7%	36.9	-2.8%	12.6x	-35%
EuroStoxx 50		4,316	4,350	4,350	0%	4.5%	EUR	4.0%	-3%	3.7%	366	-2.9%	11.9x	-38%
DAX40		15,748	16,700	16,600	-1%	5.4%	EUR	4.3%	-2%	3.7%	1440	-3.6%	11.2x	-42%
SMI		10,708	11,300	10,950	-3%	5.5%	CHF	7.0%	-5%	3.3%	685	-2.8%	16.0x	-17%
FT SE 100		7,487	7,400	7,400	0%	3.3%	GBP	4.0%	-5%	4.5%		0.7%	10.1x	-48%
MSCI EM		982	1,010	1,010	0%	5.7%	USD	11.0%	-8%	2.8%	77.7	-8.4%	13.0x	-33%
MSCI AC Asia xJ		620	655	640	-2%	5.8%	USD	13.0%	-8%	2.6%	46.3	-8.2%	13.9x	-28%
MSCI Japan		1,458	1,500	1,520	1%	6.6%	YEN	6.0%	-2%	2.3%	99.6	-2.2%	15.2x	-21%
MSCI Australia		1,413	1,350	1,400	4%	3.5%	AUD	0.0%	-2%	4.4%	93.0	-1.2%	14.8x	-23%

**12 months- assumptions**

- (Geo)politics:** Ukraine – no war extension into NATO; Israel - no oil price above \$120; Taiwan – no escalation; US – orderly elections;
- DM Economies:** 2024 US/EU soft patch, moderate acceleration 2025; Japan solid growth at potential GDP; China – containment of real estate problems
- Interest rates:** FED and ECB first cuts Q2 '24 “because they can, not because they have to”: US 10y yields below 4.5%;
- Earnings growth:** EPS growth 6% MSCI AC World
- US valuation:** PE trailing PE in 12 months just-below 20x for S&P 500;
- European valuation:** solid pan-Europe earnings results but “value” style recovery required for outperformance
- EM:** Real-estate and local government debt problems a drag on earnings and multiple; cutting EPS and targets

Source: DWS Investment GmbH as of December 2023

## 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	
<b>DWS 2024E S&amp;P 500 EPS</b>	<b>\$242.00</b>	<b>DWS 2024E S&amp;P 500 DPS</b>	<b>\$74.00</b>	DWS 2024E S&P 500 aggregate ROE	22.0%	Fair long-term nominal return on S&P 500 index	8.25%
		2024E dividend payout ratio	31%	2023E end S&P 500 book value per share	\$1,100	Components of estimated fair S&P 500 return:	
<b>DWS "normal 2024E" S&amp;P 500 EPS</b>	<b>\$240.00</b>	<b>DWS "normal 2024E" S&amp;P 500 DPS</b>	<b>\$74.00</b>	DWS "normal 2024E" S&P 500 aggregate ROE	20.5%	+ Long-term real risk free interest rate	1.75%
"Normal 2024E" EPS / 2024 EPS	99%	Normal dividend payout ratio	33%			+ Long-term fair S&P 500 equity risk premium*	4.00%
Accounting quality adjustment to pro forma EPS	-\$15.00	EPS directed to net share repurchases	\$38.00	<b>S&amp;P EPS retained for true reinvestment</b>	<b>50%</b>	<b>= Long-term real S&amp;P 500 cost of equity</b>	<b>5.75%</b>
		Normal share repurchase payout ratio	17%	<b>Estimated ROE on reinvested S&amp;P EPS</b>	<b>8.85%</b>	+ Long-term inflation forecast	2.50%
<b>Normal 2024E S&amp;P 500 EPS fair to capitalize</b>	<b>\$225</b>	Total payout of S&P 500 EPS	\$112.00	<b>Economic margin (EM) or ROE-CoE</b>	<b>0.60%</b>	<b>= S&amp;P 500 nominal cost of equity</b>	<b>8.25%</b>
Key principle: steady-state value = normal EPS / real CoE		Total payout ratio of normal and quality adj. EPS	50%	Sources of long-term earnings growth:		* S&P 500 ERP history 300-400bps, w/ real CoE @ 5% - 6.5%	
<u>S&amp;P 500 EPS Capitalization Valuation</u>		<u>S&amp;P 500 DPS Discount Model</u>		+ Long-term inflation forecast	2.50%	<u>Fair S&amp;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 true reinvestment	2.89%	2023E end S&P 500 book value per share	\$1,100
S&P 500 intrinsic value at 2024 start	4373	S&P 500 intrinsic value at 2024 start	4373	+ Value added return on true reinvestment	0.30%	Fair PB = Fair PE * normal aggregate ROE	4.36
<b>S&amp;P 500 intrinsic value at 2024 end</b>	<b>4660</b>	<b>S&amp;P 500 intrinsic value at 2024 end</b>	<b>4660</b>	= Long-term earnings growth	5.69%	Fair PE =(inc ROE-g)/(inc real ROE*(real CoE-real g))	21.3
Implied fair fwd PE in early 2024 on 2024E \$242 EPS	18.1	Implied fair forward yield on 2024E DPS of \$74.0	1.69%	+ Growth from net share repurchases	0.87%	<b>= Long-term S&amp;P 500 EPS/DPS growth</b>	<b>6.56%</b>
Implied fair trailing PE at 2024 end on 2024E \$242 EPS	19.3	Implied fair trailing yield on 2024E DPS of \$74.0	1.59%	= <b>Total long-term return at constant PE</b>	<b>8.25%</b>	Implied S&P 500 fair value of book at 2024 start	4800
				+ Fair normal dividend yield	1.69%	Steady-state PB = normal agg. ROE / real CoE	3.56
						Confirmed by fair steady-state PE = 1 / real CoE	17.4
Normal EPS / (real CoE-value added EPS growth)	4129	DPS discount model using true DPS (all payout)	4373	Value added growth premium in fair value est.	12%	Normal 2024E economic profit per share	\$161.75

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

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

2024E Normal S&P 500 EPS						
	\$230	\$235	\$240	\$245	\$250	
<b>5.25%</b>	5392	5584	5782	5984	6191	
<b>5.50%</b>	4847	5003	5160	5321	5484	
<b>5.75%</b>	4403	4531	<b>4660</b>	4791	4923	
<b>6.00%</b>	4034	4141	4249	<b>4358</b>	4466	
<b>6.25%</b>	3723	3814	3905	3997	4088	

Equity Risk Premium (ERP) is the expected excess return that investing in the S&P 500 provides over the return from government Treasury bonds.  
Source: DWS Investment Management GmbH as of December 2023

DWS Investment GmbH View: S&P 500 fair value by sector: Assuming a ~5.75% real cost of equity (CoE) for overall S&P 500

	Market Value (\$bn)	Current 2024 PE	2024E Earnings (\$bn)	Normal Ratio	Normal 2024E Earnings	Accounting Quality Adjustment	Fully Adjusted Earnings	Net Debt / Market Cap	FCF / EPS	Real CoE	Steady State Value	Growth Premium	2024 Start Fair Value (\$bn)	2024E Dividend Yield	2024 End Fair Value (\$bn)	PE on Normal 2024E EPS	2024 End Upside %	2024 End Upside vs. S&P 500
Communication Services	3,461	16.9	205.0	99%	203.1	-7%	188.9	14%	0.83	5.70%	3,314	12%	3,712	1.0%	3,979	19.6	15%	17%
Consumer Discretionary	4,210	25.5	165.0	101%	166.2	-6%	156.2	12%	0.74	5.65%	2,764	23%	3,399	1.1%	3,640	21.9	-14%	-12%
<i>Automobiles</i>	745	29.8	25.0	95%	23.8	-8%	21.9	24%	0.99	6.75%	324	40%	453	0.4%	493	20.8	-34%	-32%
<i>Broadline (Internet) Retail</i>	1,347	42.1	32.0	115%	36.8	-5%	35.0	1%	0.18	5.50%	636	60%	1,017	0.0%	1,098	29.8	-18%	-17%
<i>ex. Auto &amp; Broadline (Internet) Retail</i>	2,118	19.6	108.0	98%	105.6	-7%	99.4	14%	0.75	5.51%	1,805	7%	1,929	1.5%	2,055	19.5	-3%	-1%
Consumer Staples	2,444	19.1	128.0	98%	125.7	-6%	118.2	15%	0.84	5.25%	2,251	0%	2,251	2.9%	2,359	18.8	-3%	-2%
Energy	1,563	10.2	152.5	90%	137.8	-8%	126.8	14%	0.91	6.25%	2,029	-20%	1,623	2.7%	1,721	12.5	10%	12%
Financials	5,167	14.8	349.5	97%	339.2	-7%	315.5		1.10	6.50%	4,854	-3%	4,708	2.0%	5,039	14.9	-2%	-1%
<i>Banks</i>	1,246	9.9	126.0	95%	119.7	-10%	107.7		1.11	7.50%	1,436	-12%	1,264	3.3%	1,349	11.3	8%	10%
Health Care	5,002	17.4	288.0	99%	284.7	-8%	261.9	10%	1.14	5.60%	4,677	5%	4,911	1.5%	5,235	18.4	5%	6%
Industrials	3,273	19.1	171.0	101%	172.6	-7%	160.5	17%	0.88	5.75%	2,792	5%	2,932	1.8%	3,120	18.1	-5%	-3%
Information Technology	11,475	26.7	430.0	103%	443.3	-3%	430.0	2%	0.95	5.50%	7,817	30%	10,163	0.9%	10,884	24.6	-5%	-4%
Materials	944	18.9	49.9	97%	48.6	-8%	44.7	19%	0.89	6.25%	715	7%	765	1.6%	820	16.9	-13%	-12%
Real Estate	914	17.7	51.5	97%	49.8	-7%	46.3	36%	1.80	5.75%	806	8%	870	3.6%	911	18.3	0%	1%
Utilities	920	16.1	57.2	103%	59.1	-7%	54.9	88%	-0.64	5.75%	955	2%	974	3.7%	1,019	17.3	11%	12%
S&P 500 (\$ bn)	39,371	19.2	2047.6	99%	2030.1	-6.2%	1903.9			5.74%	32,974	10.1%	36308	1.6%	38,728	19.1	-2%	0%
S&P 500 Index (\$/sh)	4644	19.2	242.0	99%	240.0	-6.3%	225.0	11%	0.93	5.75%	3913	11.8%	4373	1.6%	4660	19.4	0%	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 12/12/2023. Past performance may not be indicative of future results. The estimated 2024 year end upside is on absolute valuation basis of each sector, not on relative sector valuation basis.

## S&P 500 Sector and Industry views

	Market	Allocated	Sector	2022	2023	2024	Overweight	2022	2023	2024	Equal weight	2022	2023	2024	Underweight	2022	2023	2024	Sector OW				
Over-weight	12.7%	17.0%	Health Care	16.2	20.4	17.4	Biotechnology	12.6	17.3	15.9	Health Care Providers & Services	17.2	16.0	15.1	Life Sciences Tools & Services	22.2	25.9	24.7	Sector UW	9.75%			
							Health Care Equipment & Supplies	24.6	24.7	23.0									Industry OW	-9.75%			
							Pharmaceuticals	13.4	23.0	15.8									Industry UW	21.18%			
	8.5%	10.0%	Communication Services	23.6	19.1	16.9	Diversified Telecommunication Serv	6.8	7.4	8.0	Wireless Telecommunication Serv	77.9	22.3	17.4	Media	11.8	11.5	11.5					
	4.1%	5.6%	Energy	7.8	10.5	10.2	Entertainment	59.5	32.9	22.4													
Equal-weight	4.1%	5.6%	Energy	7.8	10.5	10.2	Interactive Media & Services	31.8	23.1	19.6													
	8.4%	9.6%	Industrials	23.2	20.7	19.1	Energy Equipment & Services	22.3	15.6	13.2													
							Oil Gas & Consumable Fuels	7.3	10.2	10.0													
	6.3%	7.2%	Consumer Staples	20.4	19.9	19.1	Aerospace & Defense	35.4	27.5	22.2	Construction & Engineering	32.4	29.6	24.7	Air Freight & Logistics	13.1	17.4	16.1					
							Passenger Airlines	16.1	7.1	6.7	Ground Transportation	19.6	21.3	20.1	Building Products	22.9	20.6	19.4					
Under-weight							Electrical Equipment	25.0	23.8	21.5	Industrial Conglomerates	22.6	23.5	19.9	Commercial Services & Supplies	37.6	34.0	31.3					
							Beverages	24.6	22.2	20.7	Consumer Staples Distribution & R	23.2	23.0	21.6	Food Products	15.0	15.7	15.7					
							Household Products	25.6	23.6	22.5	Tobacco	12.2	11.8	11.7									
							Personal Care Products	18.9	26.0	24.1													
								Banks	10.7	9.1	9.9	Financial Services	26.3	22.9	21.3	Capital Markets	18.8	19.4	18.5				
Under-weight	2.5%	2.1%	Materials	14.7	19.1	18.9	Metals & Mining	8.9	13.4	16.4	Chemicals	16.5	20.7	19.4	Construction Materials	41.4	29.6	28.2					
	28.9%	24.5%	Information Technology	32.3	31.0	26.7	Communications Equipment	17.8	15.7	15.0	Software	40.7	35.8	30.7	Containers & Packaging	13.0	17.3	16.7					
							IT Services	23.5	22.7	21.3					Electronic Equipment	20.6	22.4	20.3					
															Semiconductors	31.7	31.7	24.6					
															Technology Hardware Storage & Per	30.1	30.4	28.1					
Under-weight	10.8%	5.9%	Consumer Discretionary	37.8	27.0	25.5	Automobile Components	15	13.8	11.3	Distributors	15.3	15.8	15.3	Automobiles	25.2	27.6	29.8					
															Hotels Restaurants & Leisure	62	24.3	22.2					
															Leisure Products	10.9	16.8	12.6					
															Broadline Retail	-1681	51.8	42.1					
															Automobiles	25.2	27.6	29.8					
Under-weight															Broadline Retail	-1681	51.8	42.1					
															CD ex Auto & Broadline Retail	25.6	20.5	19.6					
Aggregate PE- DWS View											Overweight	15.9	16.7	15.3	Equalweight	26.8	23.8	21.8	Underweight	25.7	25.3	23.1	
S&P 500												4644				2022, 2023& 2024 EPS	219.41	223.00	242.00	2022, 2023 & 2024 PE	21.2	20.8	19.2
																Bottom-up Consensus EPS	219.41	222.76	247.81	Bottom-up Cons. PE	21.2	20.8	18.7
																				2022, 2023 & 2024 Ex Energy PE	21.9	21.9	20.0
																				Btm-up Cons. Ex Energy PE	22.8	21.8	19.4
<b>Macro tilts:</b>																							
Cyclicals																				-5.22%			
Defensive																				5.21%			
Value (Financial+Energy)																				1.66%			
Growth																				0.31%			
Growth ex Health Care																				-4.01%			
Consumer																				-4.04%			
Services/experience																				-0.15%			
Disc. Goods																				-4.78%			
Retailing																				-2.44%			
Durables																				-2.34%			
Staples Goods/Retail																				0.89%			
Commodity																				1.57%			
Energy																				1.53%			
Metals/Chemicals																				0.04%			
Capex																				6.92%			
Capacity additions																				3.56%			
Productivity																				3.36%			
Health Care																				4.32%			
Innovation																				3.36%			
Marketers																				2.26%			
Insurers																				-0.30%			
Financials																				0.13%			
Up rates/low spreads																				1.42%			
Capital Markets																				-2.90%			
Insurance																				1.61%			
Bond Substitutes																				0.26%			
Weak FX \$ plays																				1.03%			
High R&D plays																				2.74%			
Transports																				-0.06%			
Geopolitical risk																				2.63%			
Weak oil prices																				0.60%			
Inflation shock																				0.88%			
Stagflation Protection																				4.02%			
Domestic GDP																				-3.28%			
Global GDP																				-4.07%			
Consumer TMT																				0.25%			
Trade sensitive																				-1.04%			

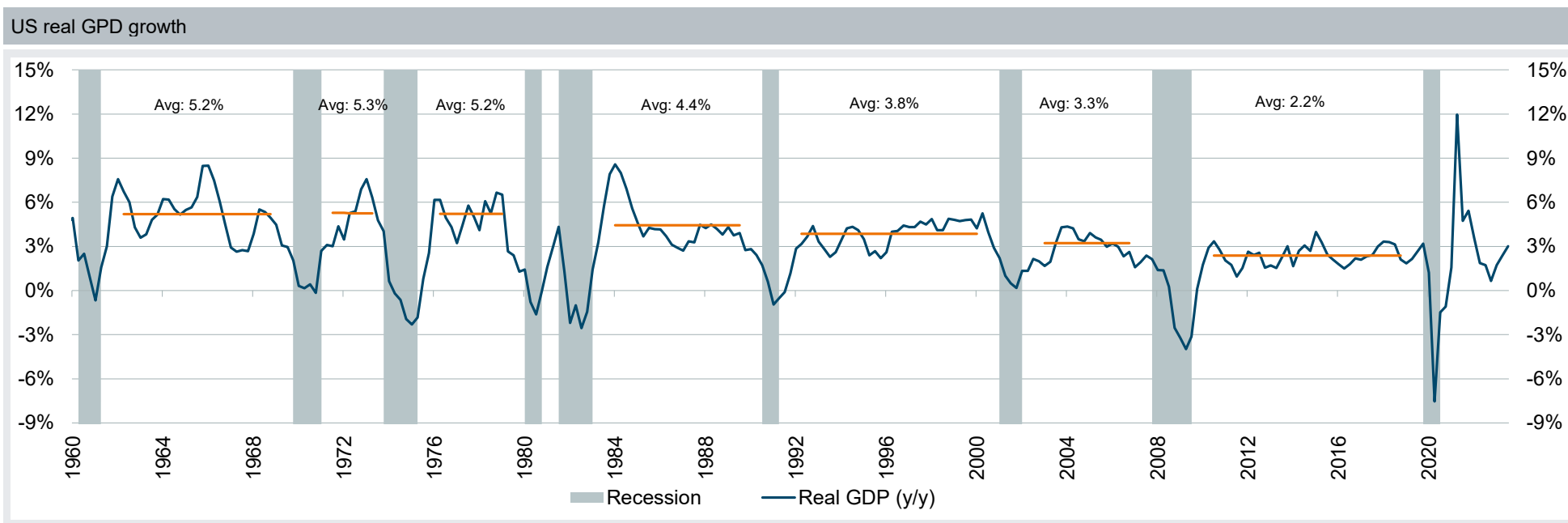
Price as of 12/12/2023

Source: DWS Investment Management GmbH



### 1. Small US recession 1H, sub 1% 2024 GDP in US & Europe , but corporate profits climb:

We expect a small recession in 1H24 led by continued weakness in durable goods demand and manufacturing, slow service consumption as jobs growth stalls along with a brief dip in investment spending as companies look to protect margins by curbing hiring, inventories and capex until more macro and cost of capital clarity emerges later in 2024. Despite brief GDP contraction, we expect very limited jobs losses owing to resilience in service consumption and tightness in labor supply from demographics. We expect disinflation, not deflation, benign credit costs and higher profits.



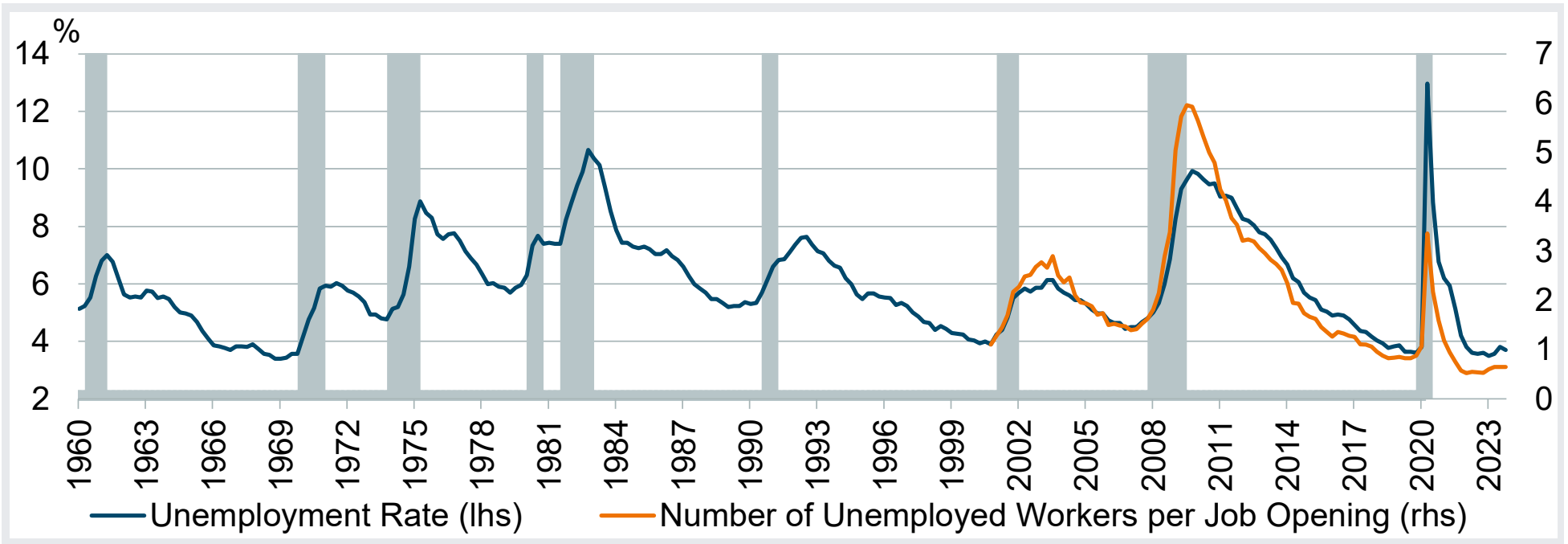
Source: BEA, Office for National Statistics, S&P, DWS Investment GmbH as of 3Q2023

DWS forecasts: U.S. GDP, inflation, fed funds rate, unemployment rate, federal debt and deficit

	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
GDP (%qq, annualized)	2.2	2.1	5.3	0.8	0.0	-1.0	0.8	1.0
GDP (%yy)	1.7	2.4	3.0	2.5	2.0	1.2	0.1	0.2
GDP (%qq)	0.6	0.5	1.3	0.2	0.0	-0.3	0.2	0.3
Unemployment Rate % (EOP)	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.3
PCE (EOP)	4.4	3.2	3.4	3.3	3.2	2.8	2.6	2.5
Core PCE (EOP)	4.8	4.3	3.7	3.4	3.2	2.6	2.4	2.3
Fiscal balance (% GDP)				-6.0				-6.0
FFR (EOP)	4.75 - 5	5 - 5.25	5.25 - 5.5	5.25 - 5.5	5.25 - 5.5	5 - 5.25	4.75 - 5	4.5 - 4.75

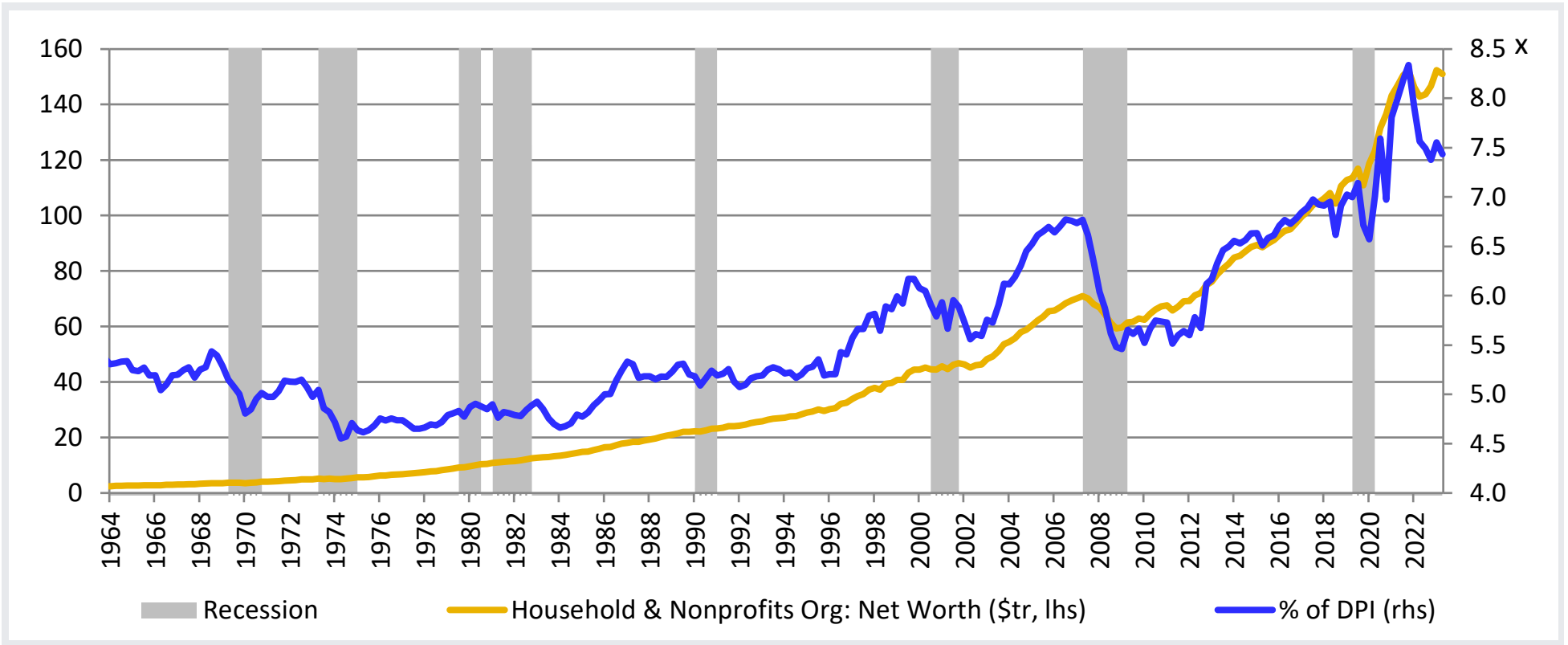
Source: DWS Investment GmbH as of December 2023. Past performance may not be indicative of future results

U.S. unemployment rate



Source: FRB, Haver, DWS Investment GmbH as of November 2023

Household net worth % of DPI



Source: FRB, Haver, DWS Investment GmbH as of 3Q2023

## 2. 2024E S&P EPS \$242 up 8.5%:

S&P EPS outlook assumes \$80/bbl avg. oil, stable dollar, benign credit costs at banks with a Fed Funds rate cut in June and at 4.5-4.75% at 2024 end. Our profit outlook differs greatly by sector, we expect flat Financial, Energy and Auto profits, but up about 20% at mega-cap Tech firms, such as the Great Eight, with healthy 7-8% EPS growth elsewhere.

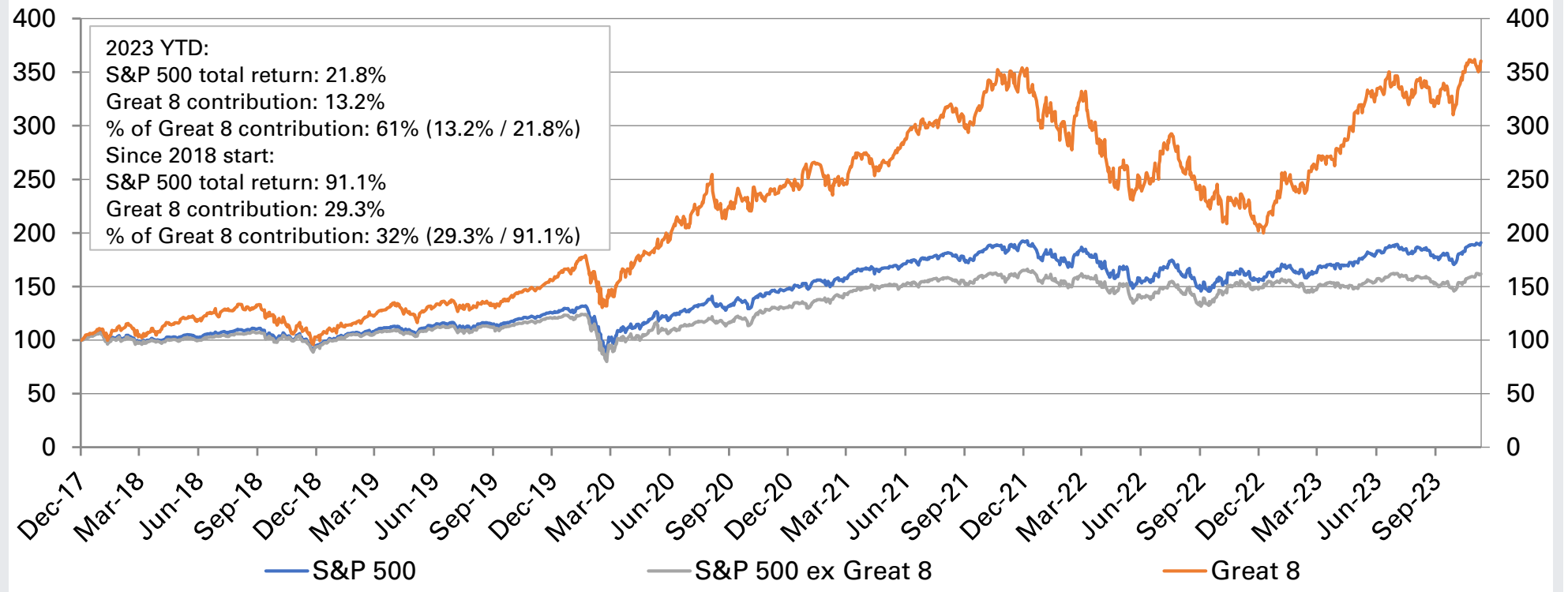
	2014A	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	y/y	Bottom-up Consensus (IBES)				DWS View				Normalized 2024		
											2023E	y/y	2024E	y/y	2023E	y/y	2024E	y/y	(\$)	% of 2023	
<b>S&amp;P 500 EPS</b> (historical index)	<b>\$118.82</b>	<b>\$117.46</b>	<b>\$118.10</b>	<b>\$132.00</b>	<b>\$161.93</b>	<b>\$162.93</b>	<b>\$139.72</b>	<b>\$208.12</b>	<b>\$218.09</b>	<b>4.8%</b>											
<b>S&amp;P 500 EPS</b> (current constituents)	<b>\$116.70</b>	<b>\$117.17</b>	<b>\$117.41</b>	<b>\$129.32</b>	<b>\$155.41</b>	<b>\$161.17</b>	<b>\$143.29</b>	<b>\$208.02</b>	<b>\$219.41</b>	<b>4.4%</b>	\$223	1.6%	\$248	11.3%	\$223	1.6%	\$242	8.5%	\$240	99%	
<b>Sector (\$ bn)</b>																					
Communication Services	67.4	77.8	90.6	98.8	123.4	129.8	135.0	187.4	146.9	-21.6%	181.4	23.5%	208.9	15.2%	181.0	23.2%	205.0	13.3%	203.1	99%	
Consumer Discretionary	58.4	68.7	76.6	80.6	95.6	93.6	64.6	124.2	111.5	-10.2%	155.6	39.6%	172.9	11.1%	156.2	40.1%	165.0	5.7%	166.2	101%	
Consumer Staples	83.9	82.7	85.4	89.7	96.8	97.9	105.2	117.8	119.5	1.5%	123.1	3.0%	130.0	5.6%	122.6	2.6%	128.0	4.4%	125.7	98%	
Energy	94.3	39.4	10.5	37.1	69.8	49.4	-6.1	79.2	200.5	153.3%	149.6	-25.4%	154.3	3.2%	148.5	-25.9%	152.5	2.7%	137.8	90%	
Financials	184.1	199.6	203.7	213.2	262.7	276.6	225.5	363.2	308.5	-15.1%	342.9	11.2%	363.8	6.1%	343.0	11.2%	349.5	1.9%	339.2	97%	
Health Care	136.7	151.7	156.5	170.8	187.5	205.5	225.7	293.4	307.9	5.0%	245.7	-20.2%	293.4	19.4%	245.5	-20.3%	288.0	17.3%	284.7	99%	
Industrials	100.5	103.9	98.3	107.2	130.5	125.1	66.9	112.0	141.1	26.0%	158.8	12.5%	176.4	11.1%	158.0	12.0%	171.0	8.2%	172.6	101%	
Information Technology	162.6	168.2	176.5	208.0	239.7	233.4	264.7	345.8	354.8	2.6%	374.2	5.5%	436.8	16.7%	370.5	4.4%	430.0	16.1%	443.3	103%	
Materials	24.8	23.8	22.9	28.9	36.4	34.3	32.5	61.4	64.0	4.2%	49.6	-22.5%	50.9	2.5%	49.5	-22.7%	49.9	0.8%	48.6	97%	
Real Estate	22.6	25.8	28.5	32.1	35.8	37.3	37.3	44.5	51.8	16.4%	51.5	-0.5%	53.3	3.4%	50.5	-2.5%	51.5	2.1%	49.8	97%	
Utilities	32.9	33.0	35.6	37.0	40.8	44.8	46.8	49.3	50.8	2.9%	54.0	6.5%	58.4	8.1%	53.5	5.3%	57.2	6.9%	59.1	103%	
<b>S&amp;P 500</b>	<b>968.3</b>	<b>974.8</b>	<b>985.0</b>	<b>1103.4</b>	<b>1319.0</b>	<b>1327.8</b>	<b>1198.1</b>	<b>1778.1</b>	<b>1857.2</b>	<b>4.4%</b>	<b>1886.3</b>	<b>1.6%</b>	<b>2099.0</b>	<b>11.3%</b>	<b>1878.7</b>	<b>1.2%</b>	<b>2047.6</b>	<b>9.0%</b>	<b>2030.1</b>	<b>99%</b>	
S&P ex. Energy (\$bn)	874.0	935.4	974.6	1066.3	1249.2	1278.4	1204.2	1698.9	1656.7	-2.5%	1736.7	4.8%	1944.7	12.0%	1730.2	4.4%	1895.1	9.5%	1892.3	100%	
S&P ex. Tech (\$bn)	805.7	806.6	808.5	895.4	1079.4	1094.4	933.4	1432.3	1502.5	4.9%	1512.1	0.6%	1662.2	9.9%	1508.2	0.4%	1617.6	7.3%	1586.8	98%	
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	11.9%											
S&P 500 Non-GAAP Net Margin	10.2%	10.4%	10.3%	10.7%	12.1%	11.5%	10.3%	13.3%	12.4%												

S&P 500 EPS	Year	1Q	2Q	3Q	4Q
<b>2019A</b>	<b>163</b>	39	41	41	42
<b>2020A</b>	<b>140</b>	33	28	38	42
<b>2021A</b>	<b>210</b>	49	53	54	54
<b>2022A</b>	<b>222</b>	55	58	56	53
<b>2023E</b>	<b>223</b>	53	54	58	58
<b>2024E</b>	<b>242</b>	57	59	62	64

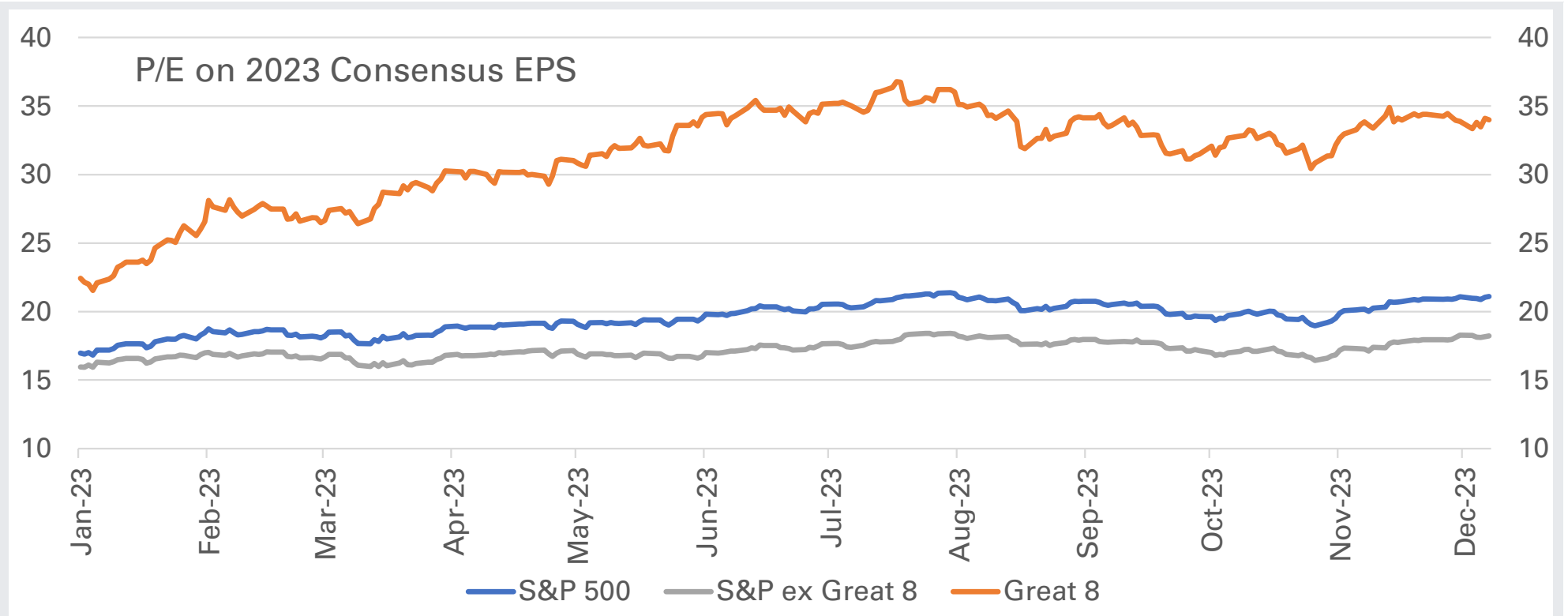
S&P 500 EPS historical constituents represents the earnings per share (EPS) of S&P 500 index constituents at the time, while S&P 500 EPS current constituents represents the earnings per share of index constituents as of the date the data was compiled 9/30/2023.

Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

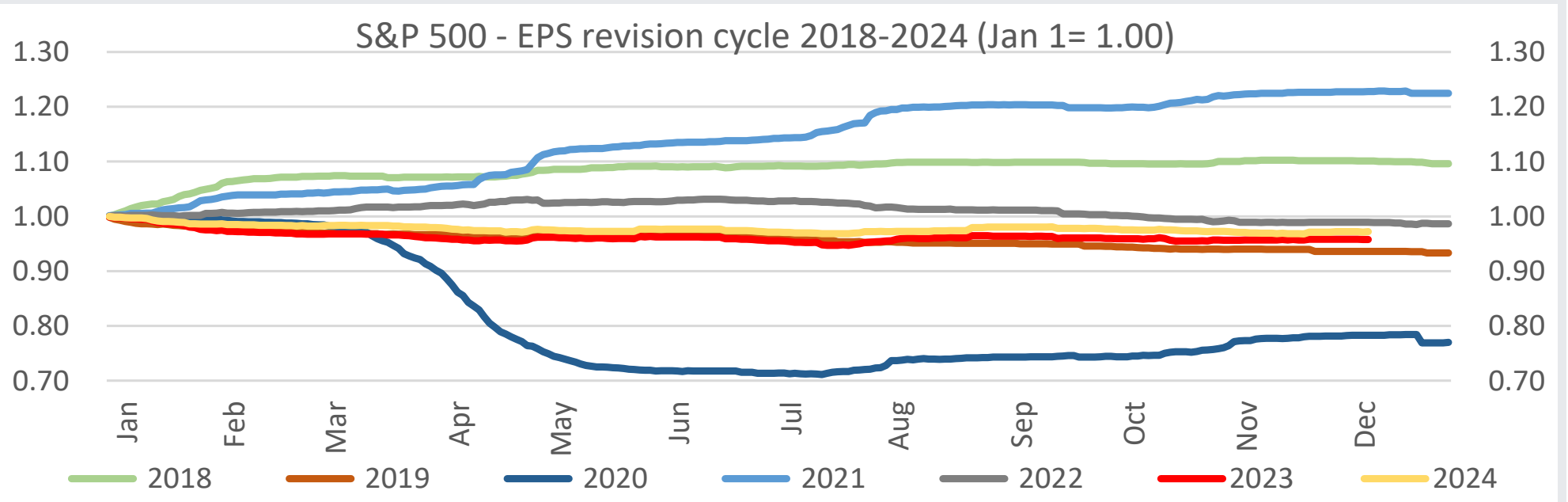
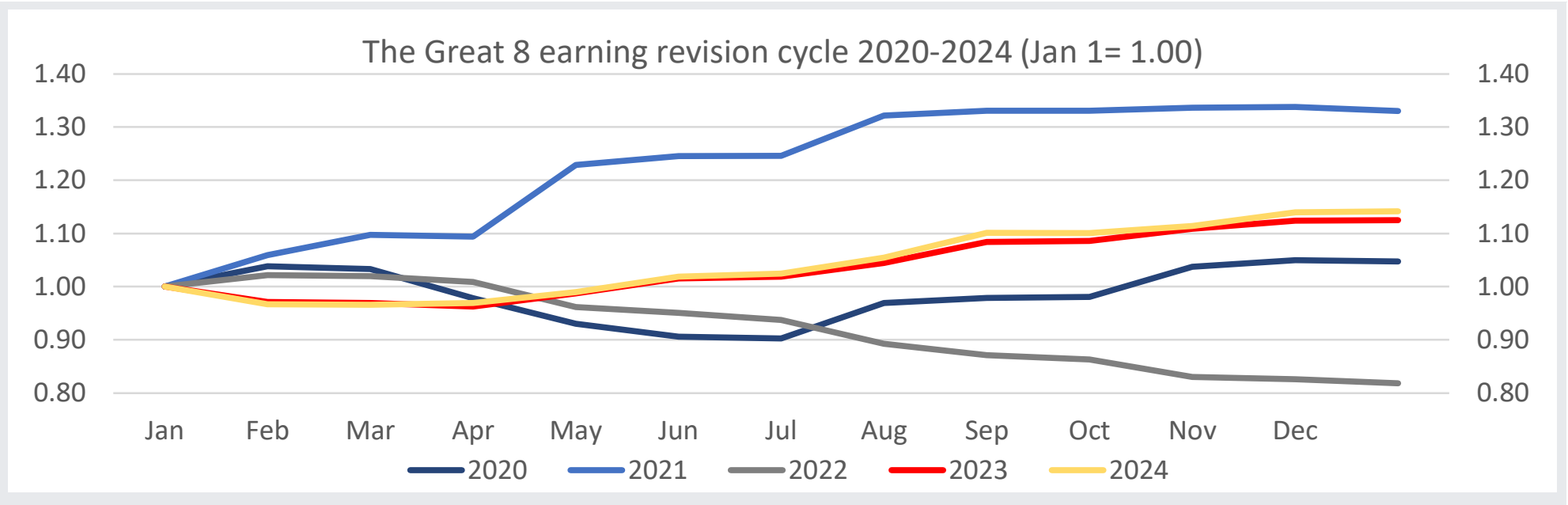
S&P 500 total return ex. the Great 8



The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA  
 Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.



The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA  
 Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.



The Great 8: AAPL, AMZN, GOOG/GOOGL, META, MSFT, NFLX, NVDA, TSLA  
 Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

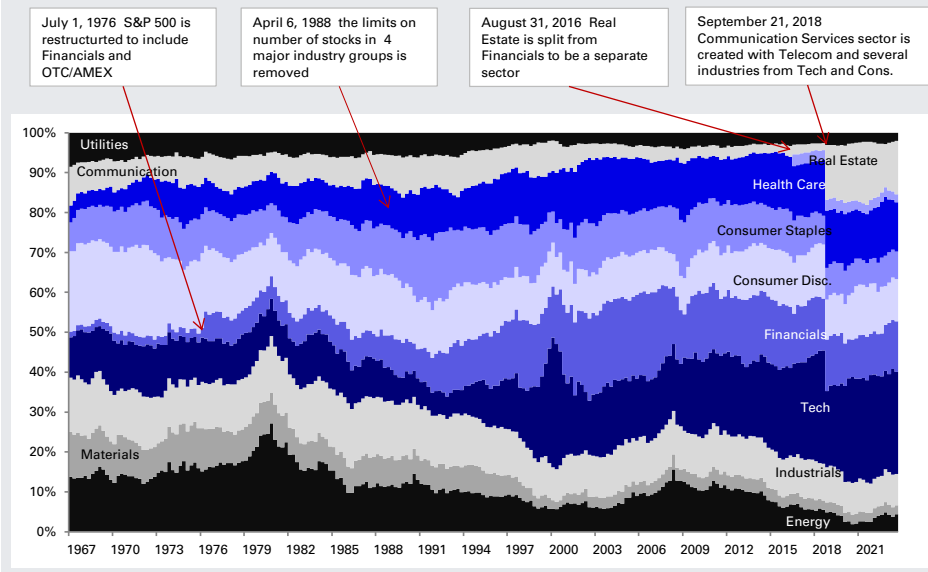
S&P 500 EPS peak to trough cycles

	Trough 4-		PE on	PE on trough	Peak to trough EPS cycle			S&P low	PE on S&P low &
	Peak 4-qtr	qtr	peak 4-qtr	4-qtr	EPS	Change in	S&P Price		
	EPS (\$/sh)	EPS (\$/sh)	EPS, qtr- end price	EPS, qtr-end price	decline	PE	Return	Price	trough EPS
1902-04	\$4.94	\$3.81	13.4x	14.5x	-23%	8%	-16%		
1906-08	6.11	4.68	12.7	13.5	-23%	6%	-18%		
1909-11	6.20	4.76	12.7	15.6	-23%	23%	-6%		
1912-14	5.65	4.16	13.6	15.6	-26%	15%	-15%		
1916-21	12.43	2.33	6.2	25.2	-81%	308%	-24%		
1926-27	1.24	1.11	10.9	15.9	-10%	46%	31%		
1929-32	1.61	0.41	13.3	16.8	-75%	26%	-68%	4.4	10.7x
1937-38	1.22	0.62	11.3	19.7	-49%	75%	-11%	8.5	13.7
1941-46	1.19	0.84	8.6	21.9	-29%	156%	81%	13.55	16.1
1950-52	2.84	2.34	7.2	10.7	-18%	48%	22%	16.68	7.1
1956-58	3.69	2.88	13.1	17.4	-22%	32%	3%	38.98	13.5
1959-61	3.43	3.03	16.6	21.3	-12%	29%	14%	52.34	17.3
1969-70	5.89	5.13	15.8	18.0	-13%	14%	-1%	69.29	13.5
1974-75	9.11	7.76	7.0	10.8	-15%	55%	32%	62.28	8.0
1981-83	15.36	12.42	8.0	12.3	-19%	54%	25%	102.42	8.2
1989-91	25.53	18.48	12.5	22.6	-28%	81%	31%	295.46	16.0
2000-02	57.37	44.19	25.0	26.0	-23%	4%	-21%	1527.46	34.6
2007-09	92.15	50.84	16.3	20.8	-45%	27%	-30%	676.53	13.3
2019-20	164.38	141.00	18.0	23.9	-14%	33%	14%	2237.40	14.2
Avg (1900-2009)			12.7x	18.0x	-29%	55%	2%		14.3x
Avg (1950 - 2009)			13.9x	18.4x	-21%	38%	9%		14.6x
Avg ex. 1916-21 (WWI profits) & Great Depression			13.9x	17.7x	-23%	42%	8%		14.6x

Source: S&P, IBES, Cowles Commission, DWS Investment GmbH as of December 2023

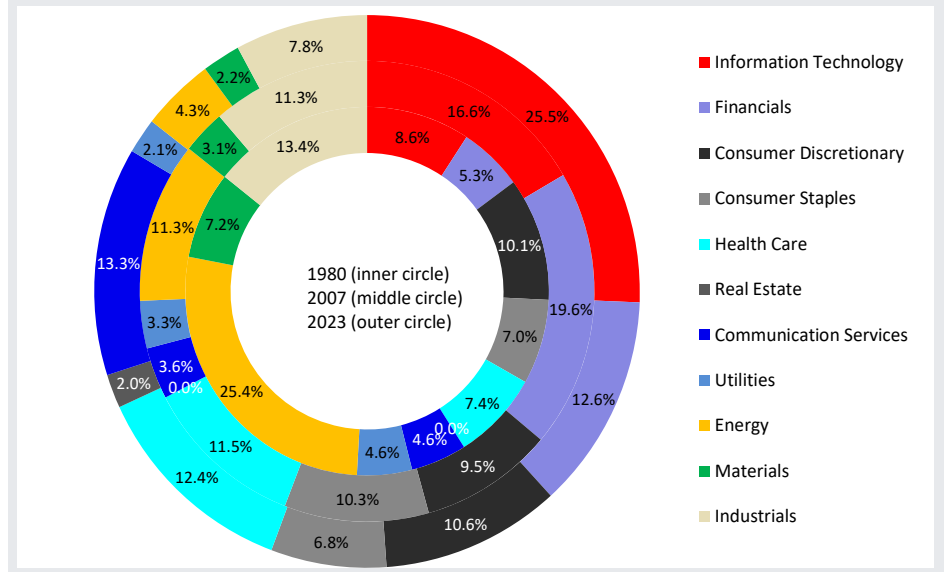


### S&P 500 sector composition by market cap

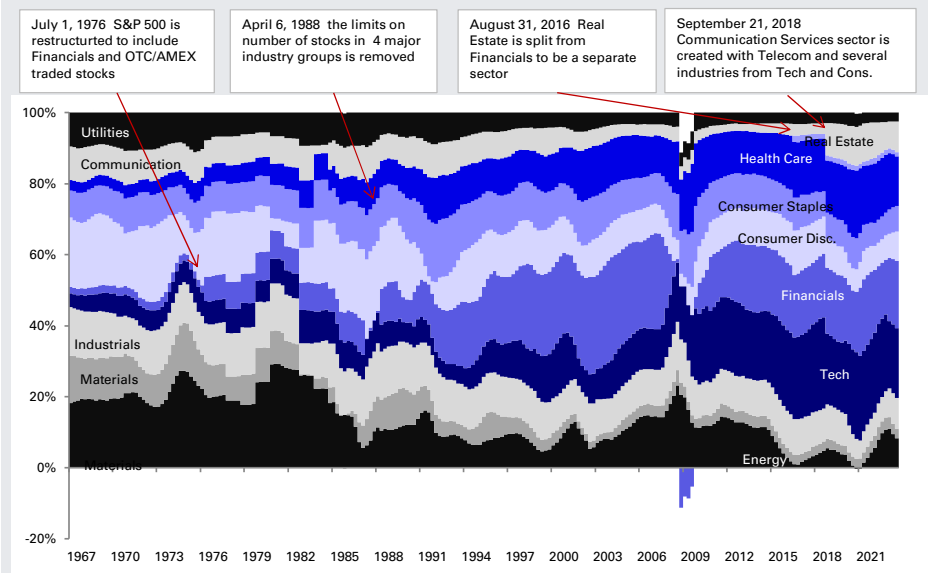


Source: S&P, Compustat, DWS Investment GmbH as of 3Q2023

### S&P 500 sector composition by market cap: 1980 vs. 2007 vs. 2023

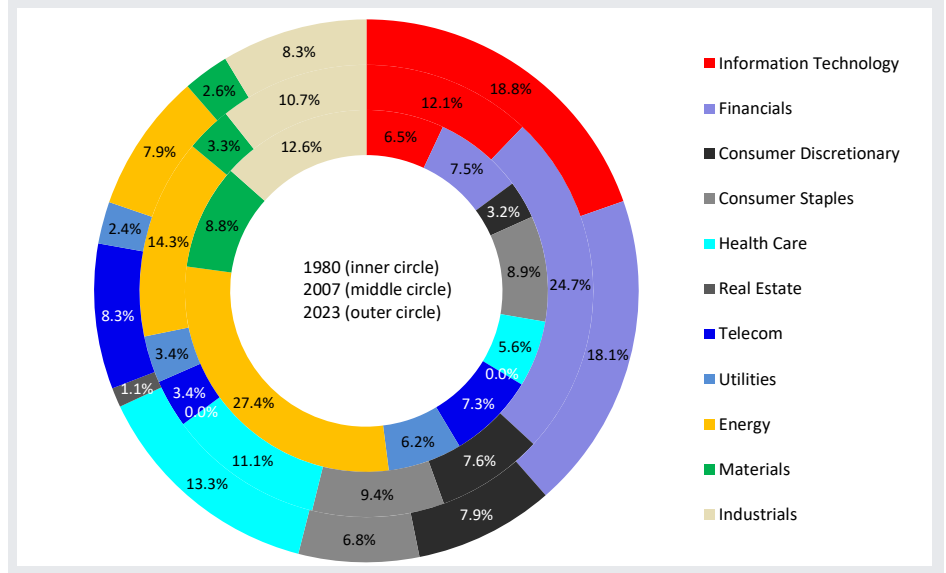


### S&P 500 sector composition by earnings



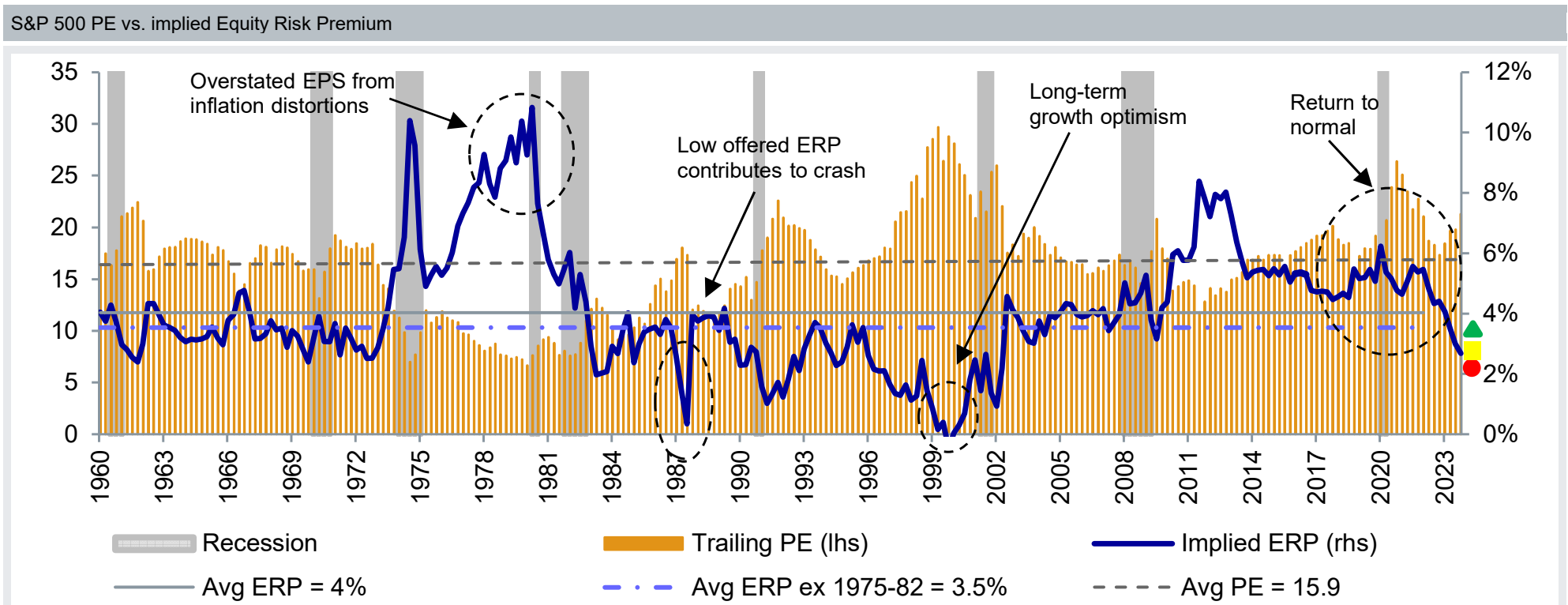
Source: S&P, Compustat, DWS Investment GmbH as of 3Q2023

### S&P 500 sector composition by earnings: 1980 vs. 2007 vs. 2023



3. 4700 S&P 500 target for 2024 end with a sustained near 20 trailing PE:

Our S&P target is 19.5x our 2024E EPS, supported by Treasury yields still below average since 1960, the S&P being more growth and Tech stock tilted and lower investment fees than history. Our real cost of equity estimate is 5.75% = 1.75% 10yr TIPS yield + 4% Equity Risk Premium. This supports a fair steady-state PE of  $1/5.75\% = 17.5$ . We then add a 10% premium for economic profit growth potential.

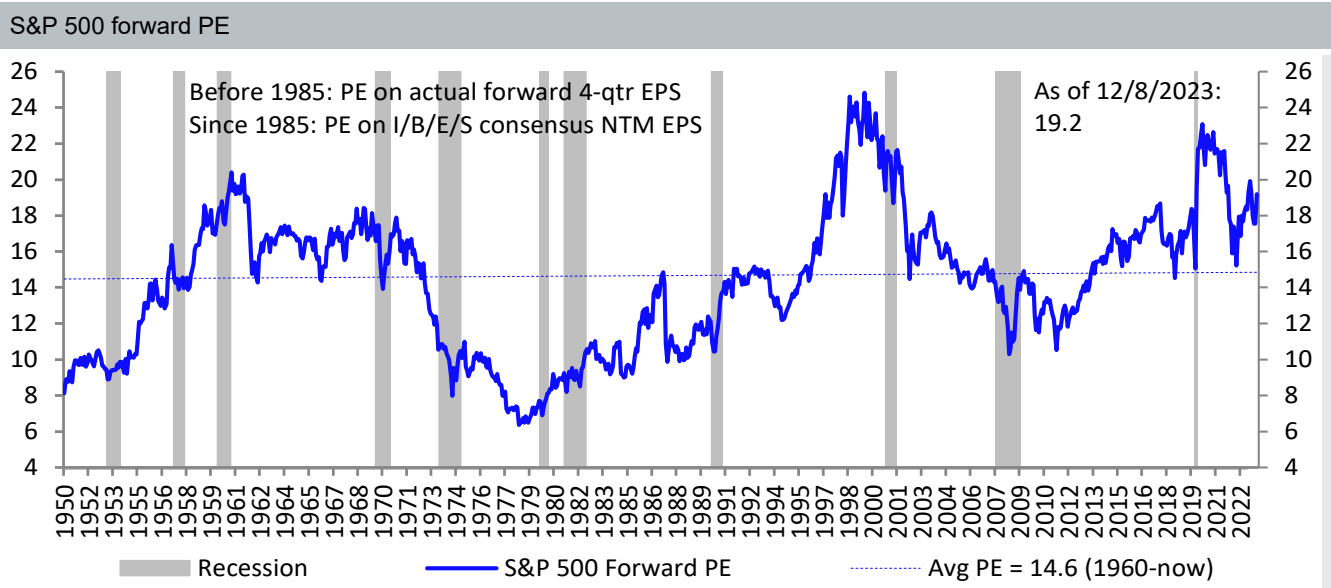


Red circle: ERP=2.3% implied by PE on our 2023 EPS estimate of \$223 and 2.5% assumed real 10 year interest rate

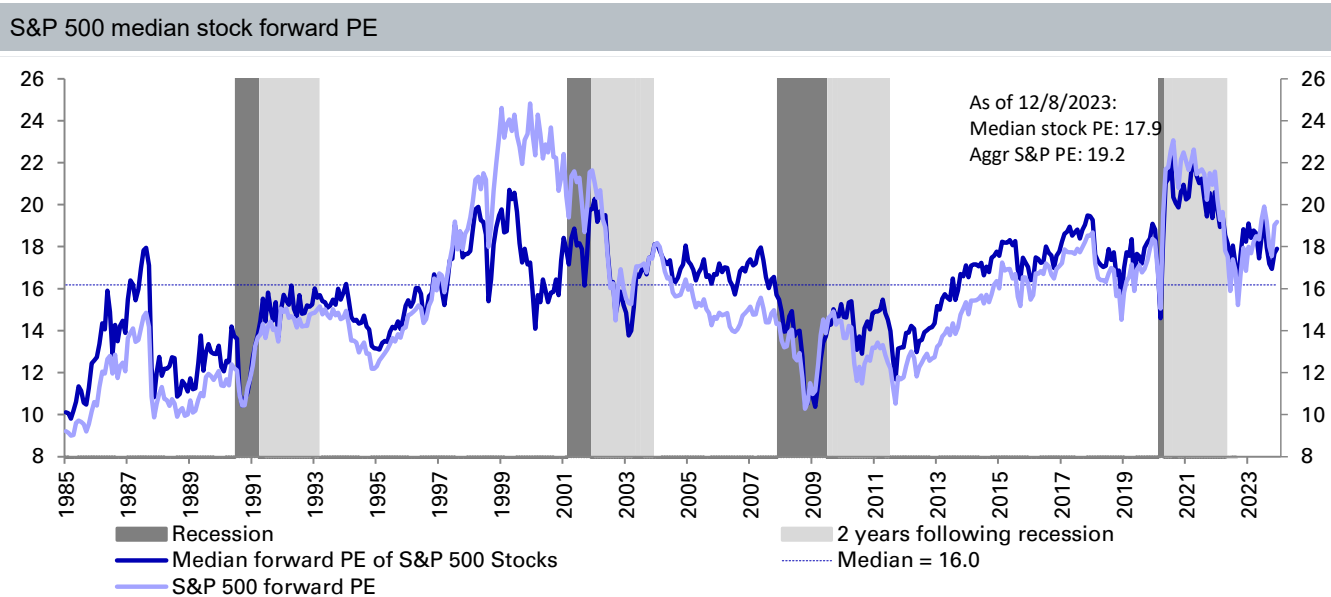
Yellow square: ERP=2.8% implied by PE on our 2023 EPS estimate of \$223 and 2.0% assumed real 10 year interest rate

Green triangle: ERP=3.3% implied by PE on our 2023 EPS estimate of \$223 and 1.5% assumed real 10 year interest rate

Source: S&P, Federal Reserve, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

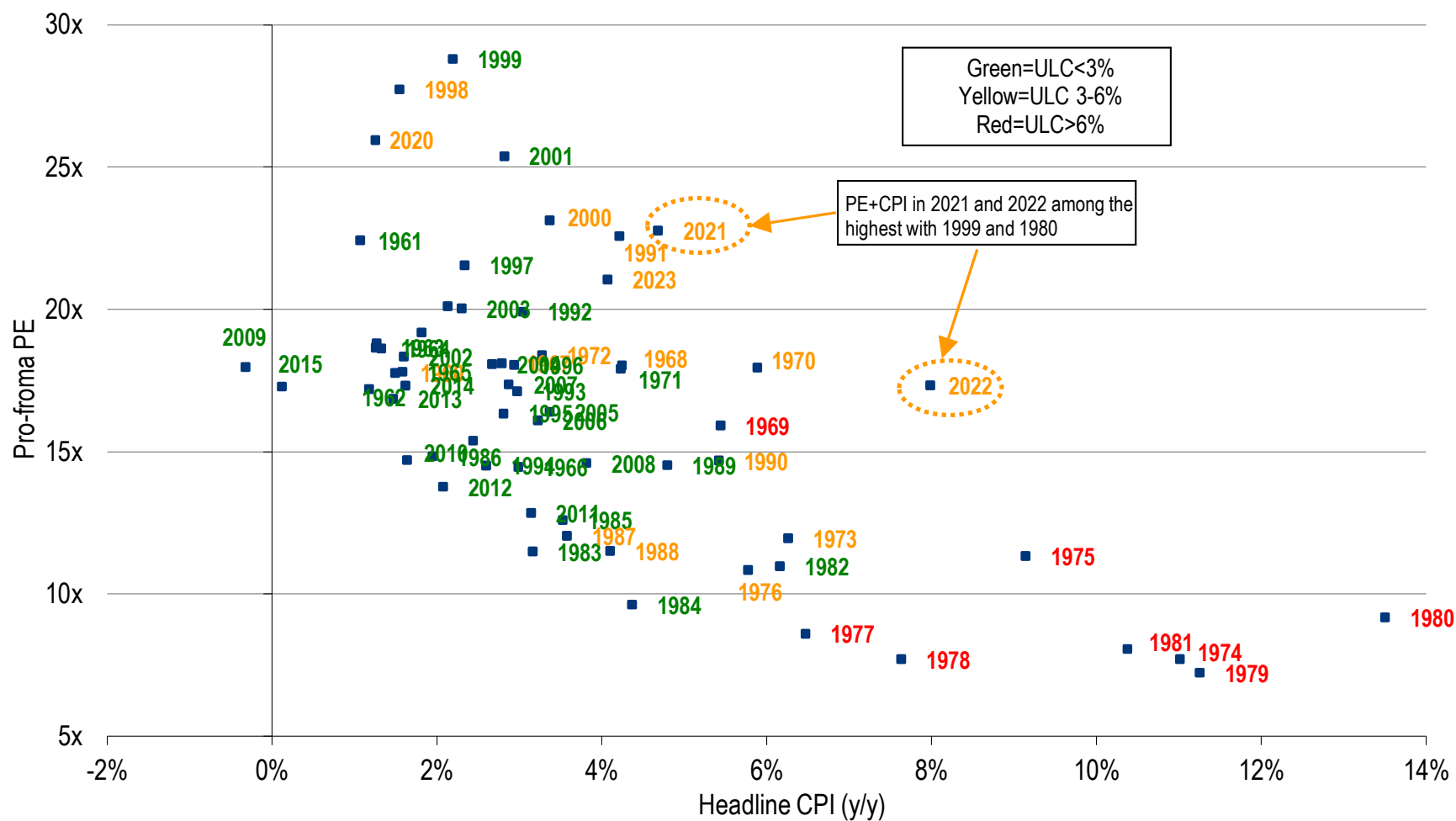


Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.



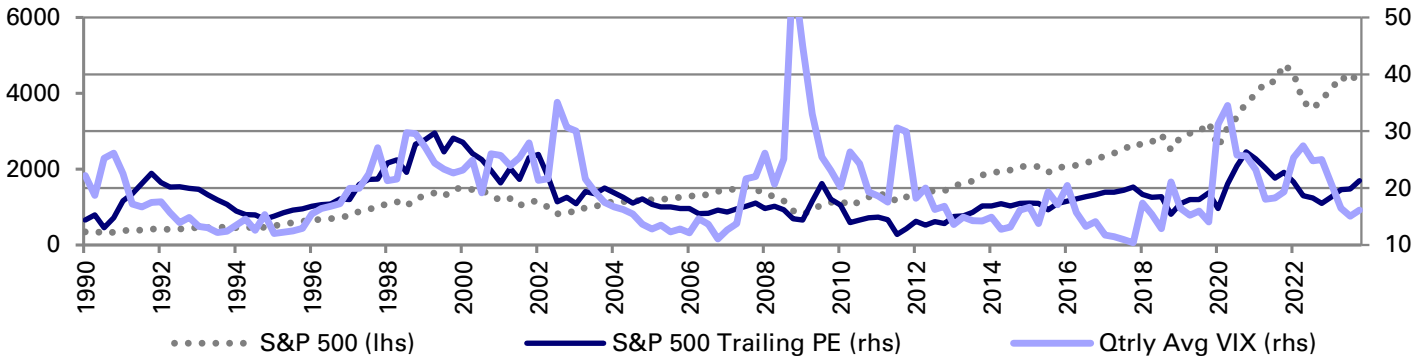
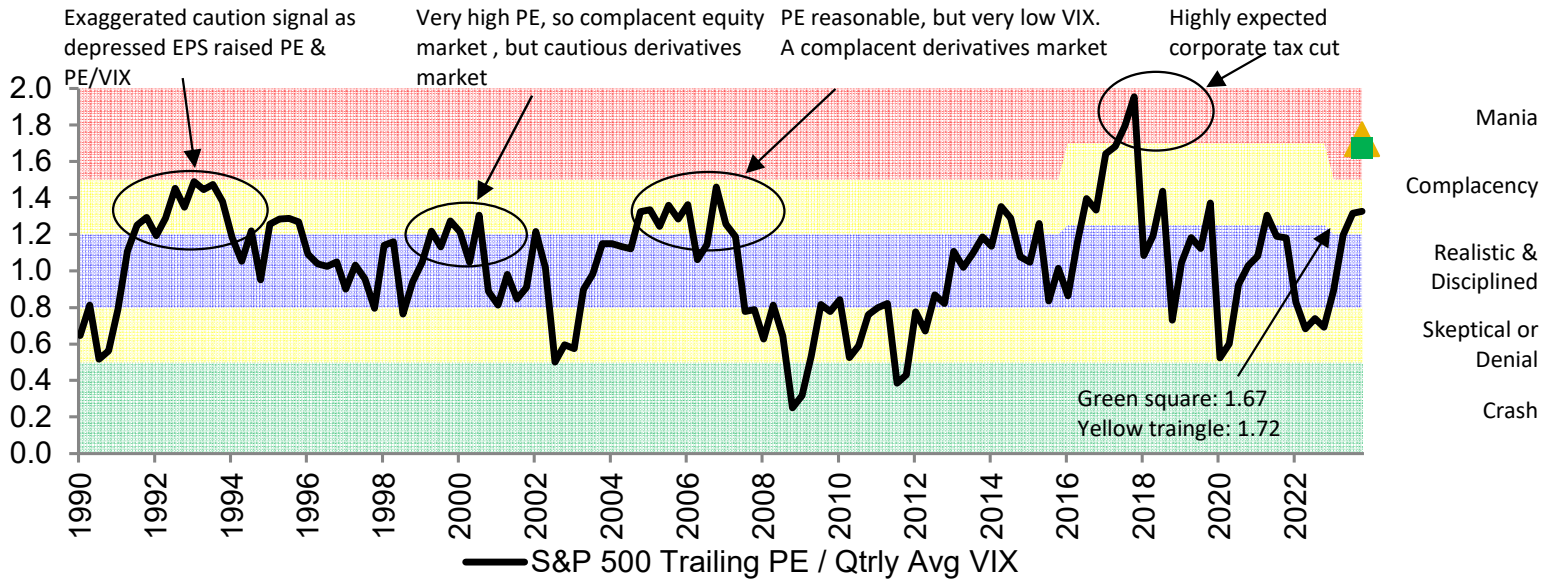
Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

S&P 500 PE vs. Inflation



Source: Haver, DWS Investment GmbH as of 12/8/2023

PE / VIX: Where valuation meets market emotion



Green square: PE on our 2023E normalized EPS dividend by VIX on Dec 8 2023.

Yellow triangle: Trailing PE as of Dec 8 2023 divided by VIX on Dec 8 2023.

Source: S&P, CBOE, DWS Investment Gmb6H as of 12/8/2023. Past performance may not be indicative of future results.

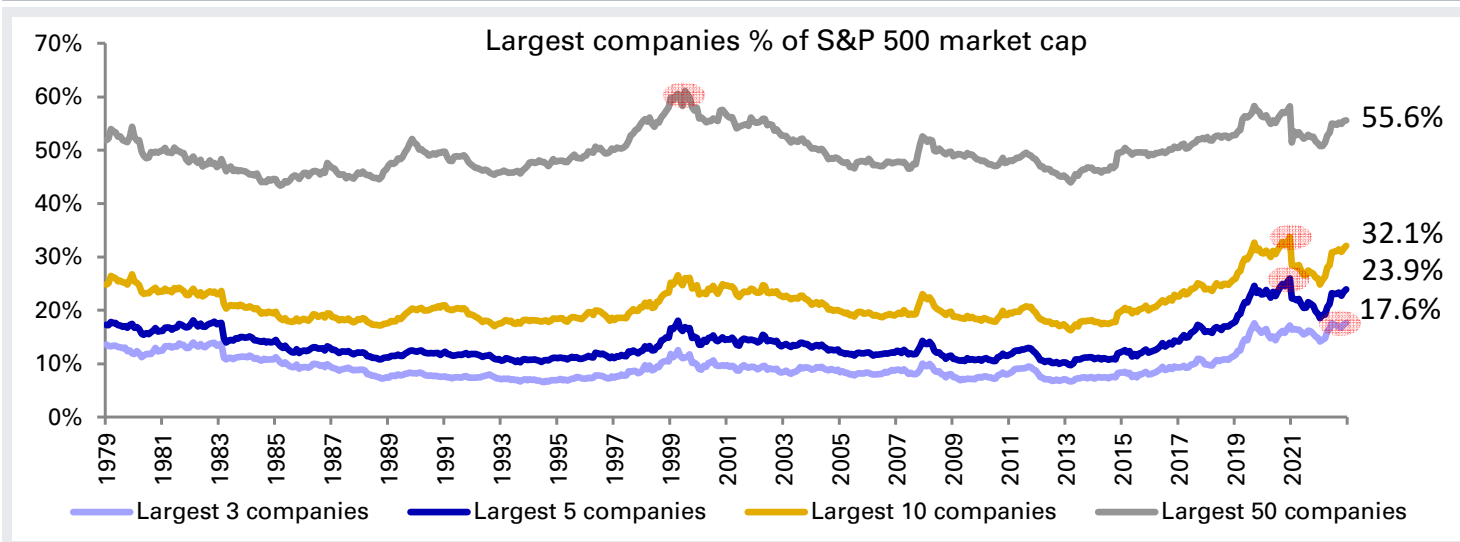
The PE is based on forward actual EPS, which was not known at the time from which the forward returns are measured. EPS could disappoint or perhaps positively surprise, getting the forward EPS outlook right matters most. This analysis shows typical returns against various valuation ranges when forward EPS estimates are relatively correct.

S&P PE (monthly) and subsequent total returns since 1960

S&P 500 PE on Fwd 4-Qtr EPS	Count	Average Subsequent Annualized Return				
		1 Year	2 Year	3-Year	4-Year	5-Year
>22	58	-6.4%	-4.2%	-2.8%	-1.1%	1.2%
20 to 22	15	0.6%	8.7%	6.4%	3.4%	3.3%
18 to 20	56	5.4%	6.7%	8.9%	10.1%	9.7%
16 to 18	158	10.1%	7.7%	7.9%	8.1%	7.3%
<b>14 to 16</b>	<b>135</b>	<b>15.4%</b>	<b>12.5%</b>	<b>10.5%</b>	<b>9.0%</b>	<b>8.7%</b>
12 to 14	88	15.9%	15.4%	16.0%	15.6%	15.2%
10 to 12	60	14.5%	14.7%	13.4%	13.5%	12.8%
<10	112	16.1%	15.8%	15.6%	15.5%	16.0%
<b>All</b>	<b>682</b>	<b>11.3%</b>	<b>10.6%</b>	<b>10.4%</b>	<b>10.3%</b>	<b>10.1%</b>

Source: S&P, Haver, DWS Investment GmbH as of December 2023

Largest companies % of S&P 500 market cap



Note: The shade is the time of peak.

Sources: Compustat, DWS Investment GmbH as of 11/30/2023

#### 4. When will the Fed cut?

Unless the recession is sooner/deeper than we expect, we think rate cuts are unlikely until June 2024 to help smother the risk of inflation reaccelerating. While we think the Fed would like to validate a soft landing with a few cuts in 2024 (like 1995), opening the door to victory over inflation cuts before the November election likely requires unemployment over 4%, a few months of sub 100K new jobs and a stock market not near all time highs. Rate cuts continuing every other meeting in 2025, as we forecast, likely requires some fiscal tightening in our view.

#### Fed hike cycles since 1965

Start Date of Fed Rate Hike *	Date of Reaching Late Cycle **	Late Cycle Signals **	End Date of Fed Rate Hike	Fed Funds Effective Rate (%)	Duration of Hike (Months)	Peak Fed Rate	Total Rate Hike	1yr Yield	10yr Yield	CPI y/y	Unit Labor Cost y/y	UE (%)	PE at Start of Hike	PE at End of Hike	Avg PE during Hike	10yr - 1yr Chg (%) at Start of Hike	10yr - 1yr Chg (%) at End of Hike	Chg in 10yr-1yr (%)	Before Reaching Late Cycle (ar)	After Reaching Late Cycle (ar)	3m before Hike	Initial Reaction ***	1m	3m	6m	12m	Date of First Hike	
Dec-65	Dec-65	1	Nov-66	0.04	12	0.06	0.017	0.04	0.04	1.7%	-0.2%	0.0	18.4	14.6	-3.8	15.9	0.1	-0.4	-0.5		-14.1%	0.6%		0%	-3%	-8%	-13%	
Aug-67	Dec-67	1,3	Aug-69	0.04	25	0.09	0.054	0.05	0.05	2.9%	3.1%	0.0	17.8	16.4	-1.4	17.6	0.2	-0.8	-1.0	9.3%	-0.6%	0.9%		3%	0%	-5%	6%	
Apr-71	Apr-71	2	Aug-71	0.04	5	0.06	0.019	0.04	0.06	4.4%	1.0%	0.1	19.2	18.6	-0.6	18.9	2.0	0.8	-1.2		-13.5%	0.5%		-4%	-8%	-9%	4%	
Mar-72	Mar-73	1,2	Sep-73	0.03	19	0.11	0.075	0.04	0.06	3.8%	2.2%	0.1	18.7	14.1	-4.6	17.1	1.8	-1.2	-3.0	4.0%	-5.5%	1.0%		0%	0%	3%	4%	
Mar-74	Mar-74	1,2	Aug-74	0.09	6	0.12	0.030	0.07	0.07	10.0%	7.1%	0.1	11.8	8.3	-3.5	9.9	0.1	-1.3	-1.4		-47.0%	3.1%		-4%	-8%	-32%	-11%	
Feb-77	Feb-77	2	Apr-80	0.05	39	0.18	0.130	0.05	0.07	5.2%	5.5%	0.1	10.3	6.9	-3.4	8.2	1.9	-1.8	-3.8		2.0%	1.4%		-1%	-4%	-3%	-13%	
Aug-80	Aug-80	1,2	Jun-81	0.09	11	0.19	0.101	0.09	0.10	13.2%	11.4%	0.1	8.1	8.8	0.7	8.9	1.6	-1.4	-3.0		8.7%	2.1%		3%	15%	7%	0%	
Jan-82	Jan-82	1,2	Feb-82	0.12	2	0.15	0.024	0.13	0.14	8.9%	7.2%	0.1	8.1	7.4	-0.6	7.7	0.9	-0.3	-1.2		-52.7%	1.1%		-6%	-3%	-11%	21%	
Apr-83			Aug-84	0.09	17	0.11	0.029	0.09	0.11	3.6%	2.8%	0.1	12.1	10.0	-2.2	11.3	1.5	0.9	-0.6	1.0%		10.8%	-1.7%	10%	10%	10%	3%	3/31/1983
Jan-87	Aug-87	3	Oct-87	0.06	10	0.07	0.014	0.06	0.07	1.2%	3.0%	0.1	14.8	13.6	-1.3	17.2	1.2	1.9	0.7	37.3%	-80.2%	1.4%	0.4%	11%	19%	21%	3%	1/5/1987
Apr-88	Dec-88	1,2,3	Mar-89	0.07	12	0.10	0.032	0.07	0.08	3.8%	2.9%	0.1	12.5	11.8	-0.7	12.0	1.7	-0.2	-1.9	9.6%	27.1%	8.9%	-5.6%	2%	6%	6%	15%	3/30/1988
Feb-94			Apr-97	0.03	39	0.06	0.025	0.04	0.06	2.5%	1.6%	0.1	17.7	19.0	1.3	16.5	2.2	0.9	-1.3	18.6%		5.4%	-3.9%	-4%	-1%	3%	5%	2/4/1994
Mar-97	Apr-97	3	Apr-97	0.05	2	0.06	0.003	0.06	0.06	3.0%	1.2%	0.1	19.3	19.0	-0.3	18.5	0.9	0.9	0.0	97.6%		8.8%	-9.3%	12%	24%	32%	51%	3/25/1997
Jul-99	Mar-00	1,3	Jun-00	0.05	12	0.07	0.017	0.05	0.06	2.0%	0.6%	0.0	29.7	26.1	-3.6	27.6	0.8	-0.1	-0.9	19.8%	-11.2%	5.1%	-0.8%	1%	-3%	5%	6%	6/30/1999
Jul-04	Jan-06	1,2	Jul-06	0.01	25	0.05	0.042	0.02	0.05	3.2%	1.0%	0.1	18.4	15.6	-2.8	17.0	2.6	-0.1	-2.7	10.5%	-0.5%	3.1%	-5.2%	2%	1%	8%	14%	6/30/2004
Dec-15	Dec-15	3	Apr-19	0.00	41	0.03	0.023	0.00	0.02	0.4%	2.5%	0.1	17.5	17.3	-0.2	18.6	1.8	0.1	-1.7		10.3%	7.9%	-10.1%	-1%	9%	13%	20%	12/16/2015

\* 1971, 1977, 1983, 1994, and 2004 are the first hike after recessions

\* The hikes that started in 1965, 1971, 1974, 1977, 1980, 1982, 1997 and 2015 started under late cycle conditions, despite 1971, 1977 and 2015 being the first hikes after a recession.

\* The hikes that started in 1983 and 1994 stopped before reaching late cycle conditions. All other hikes started in early-cycle conditions and continued into late-cycle conditions.

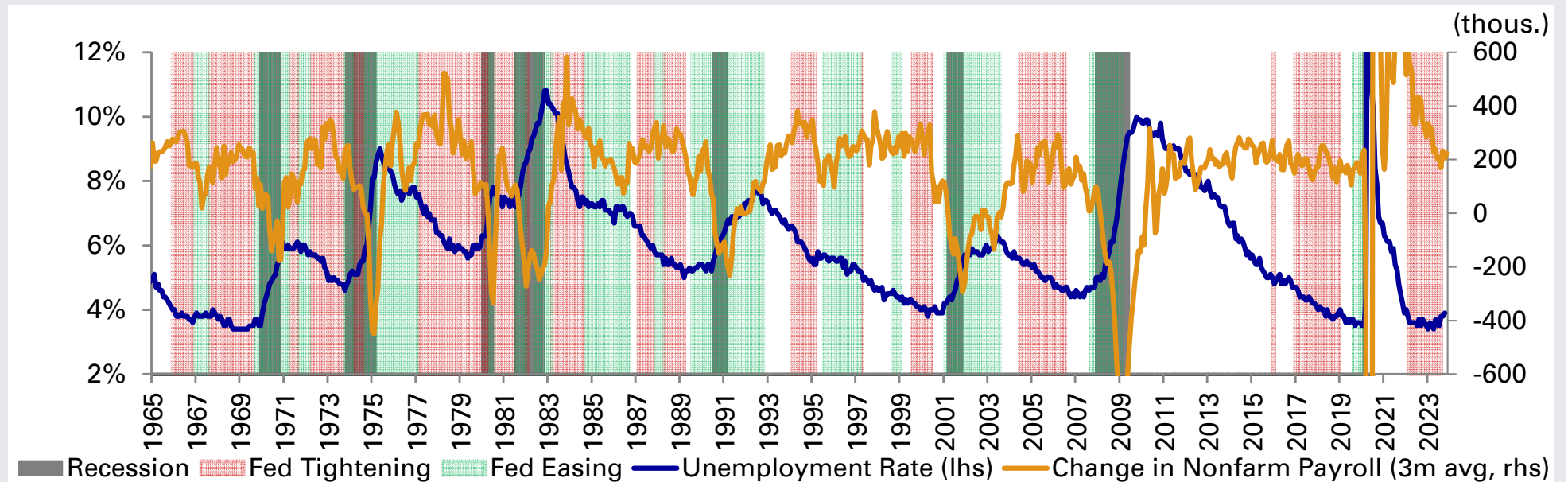
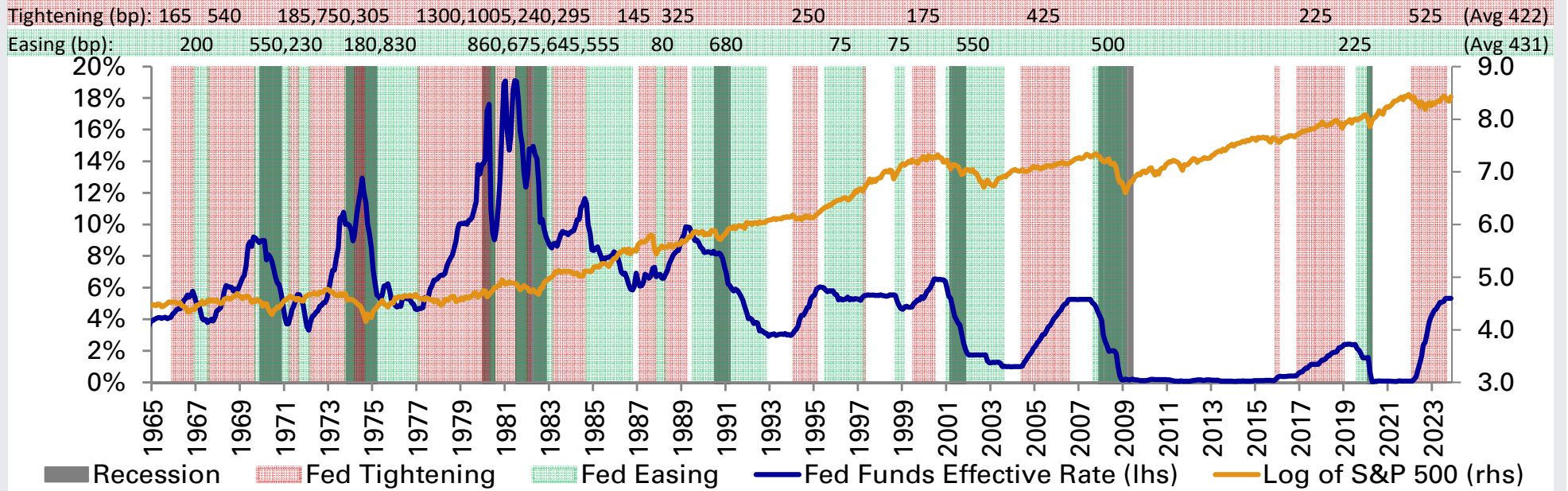
\*\* Three signs of late cycle conditions: (1) inverted yield curve; (2) high inflation; (3) more than 5 years since recession.

\*\*\* Initial reaction is the S&P price change from 1 month high before the date of first rate hike to the 1 month low after.

Note: For the 7 Fed hike cycles since 1983, the S&P performance are for 1m, 3m, 6m, and 12m after the initial reaction. For the other cycles, the S&P performance are based on monthly prices.

Source: Haver, DWS Investment GmbH as of 12/6/2022

Fed tightening and easing cycles since 1965



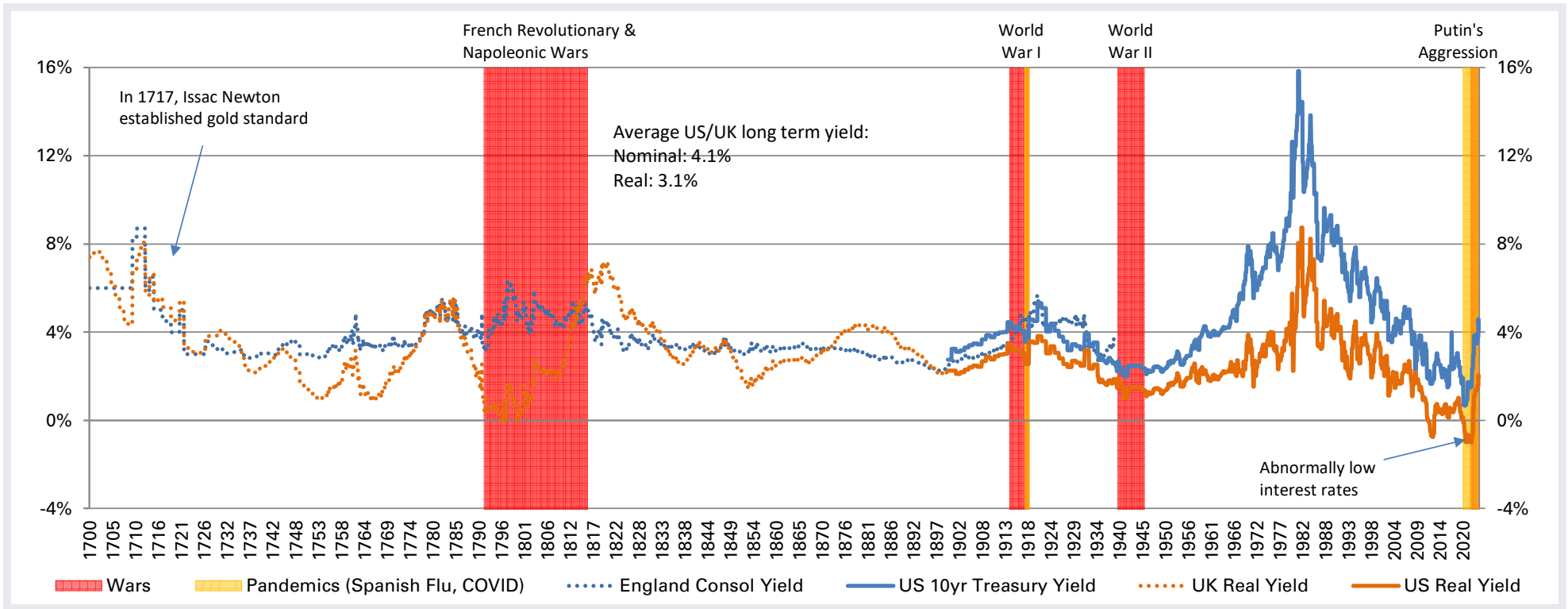
Source: Haver, DWS Investment GmbH as of 12/8/2023



## 5. Long-term interest rates rise to pre financial crisis range. What's the norm for the 2020s?

We expect 10yr Treasury yields to be 4.2% at 2024 end with long-term inflation expectations and breakevens at about 2.5%. We estimate 10yr TIPS yields at about 1.75% at 2024 end, down from about 2% today; a bit higher than our 1.5% 10yr TIPS yield estimate going into 2023. 10yr yields overshoot our expectation to touch 5% in October 2023, but since retreated to 4.2%. The bond market expects a weak 2024 economy and further disinflation. But the basics of reasonable long-term inflation assumptions and inflation/duration risk premiums remain unsure. Moreover, the deficit remains high and the Fed will likely sell over \$1 trillion of Treasuries and MBS next year.

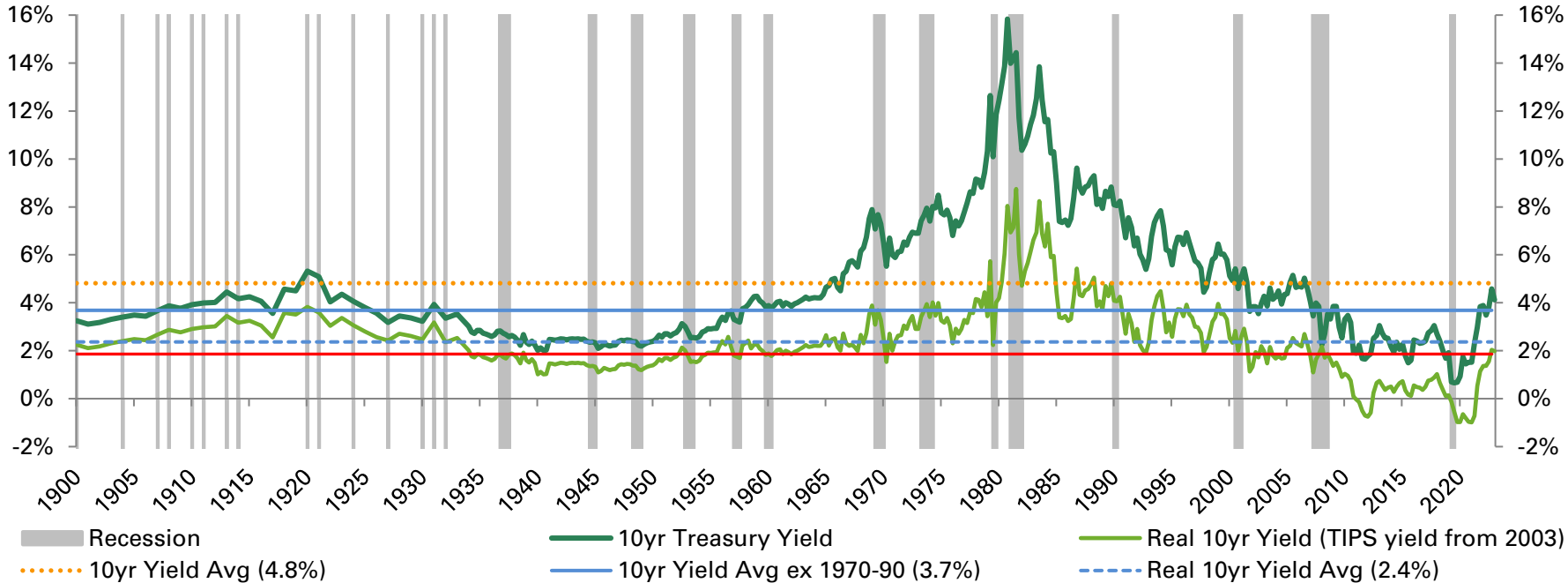
Long history of US and UK interest rates since 1700



Source: England Consol, FRB, FRBPHIL, DWS Investment GmbH as of 12/6/2023

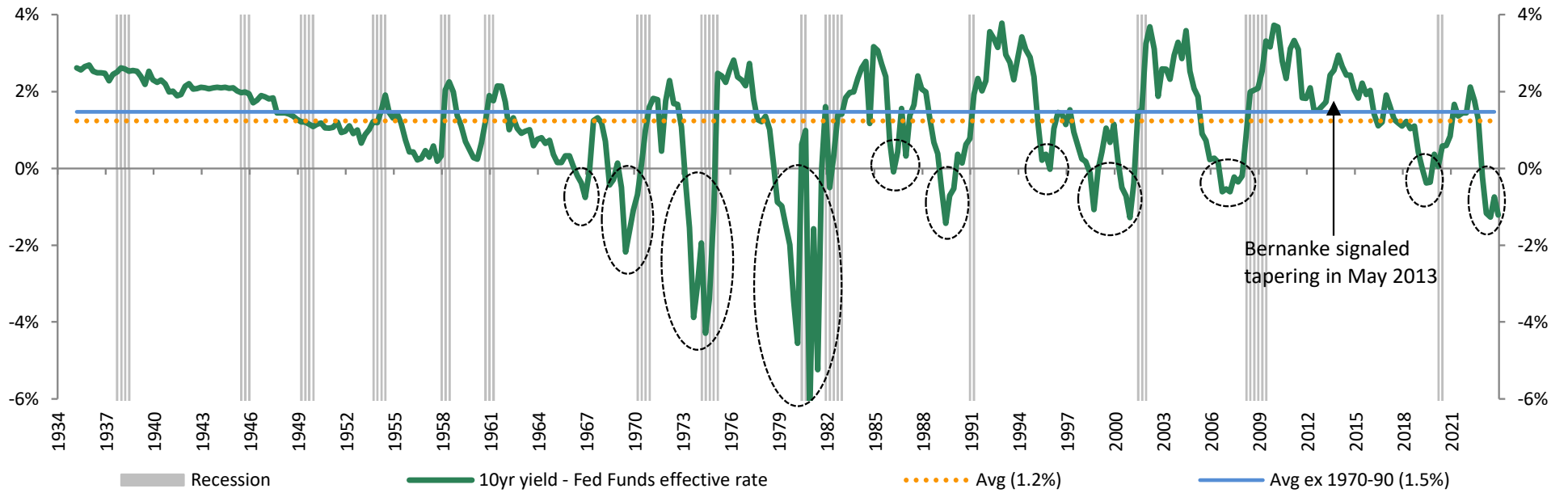
Treasuries protect against systematic risk. TIPs protect against inflation risk. The more systematic risk protection treasuries provide helps to reduce term premium.

### U.S. 10-year treasury yields: nominal and real



Source: Haver, DWS Investment GmbH as of 12/6/2023

U.S. yield curve: 10yr treasury yield – Fed Funds effective rate

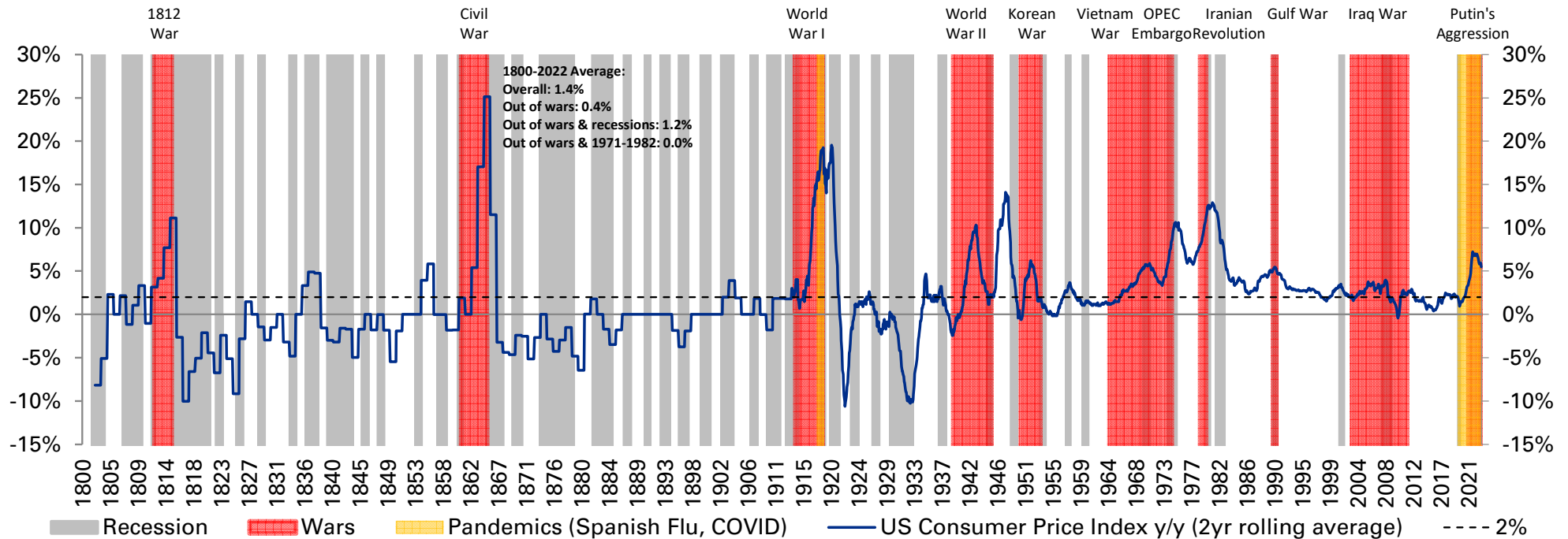


Source: Haver, DWS Investment GmbH as of 12/6/2023

## 6. How to tame inflation in 2020s? Fiscal discipline and more productivity are key:

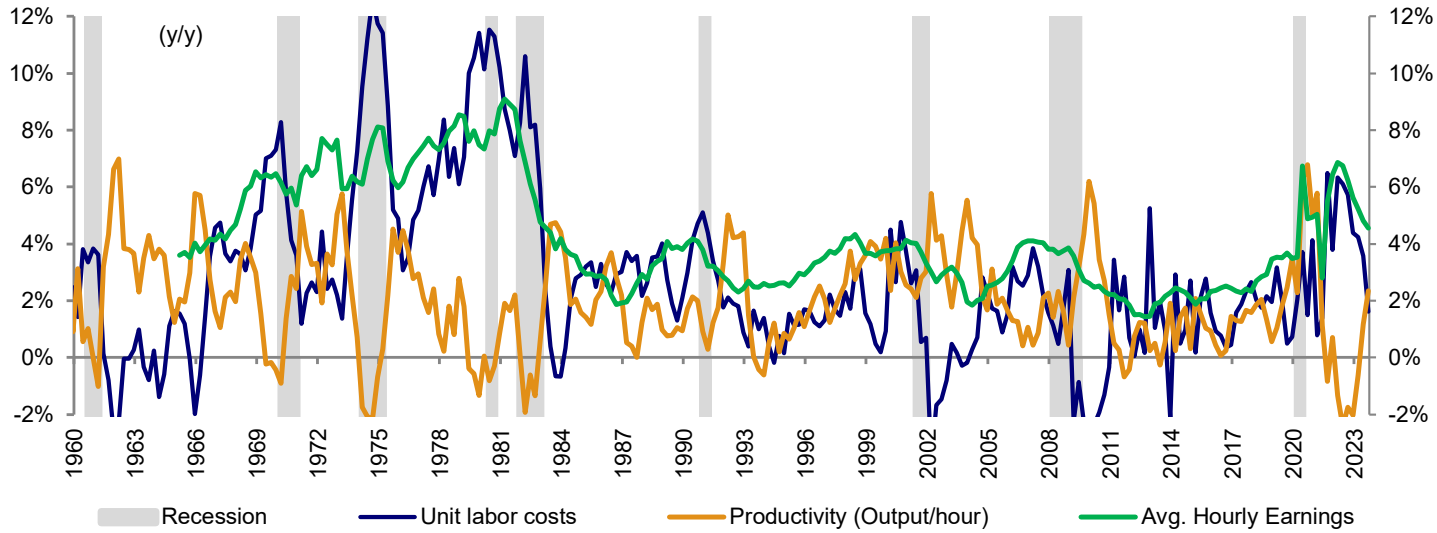
Keeping inflation tame will be challenged by conflicts, reshoring, demographics, environmental and other regulations, also the stable but slower inertia of mature service oriented economies. This should affect real growth more than inflation if there is monetary and fiscal policy discipline; but discipline can be tough politically, so it's important to guard against inflation risks. Productivity is key to good growth and alleviating difficult policy choices. Artificial intelligence (AI) is exciting, but meaningfully boosting productivity and growth takes time. Healthcare is the biggest and fastest growing part of the U.S. economy, consumption and jobs; innovation here is crucial for productivity and growth.

Long term history of U.S. inflation



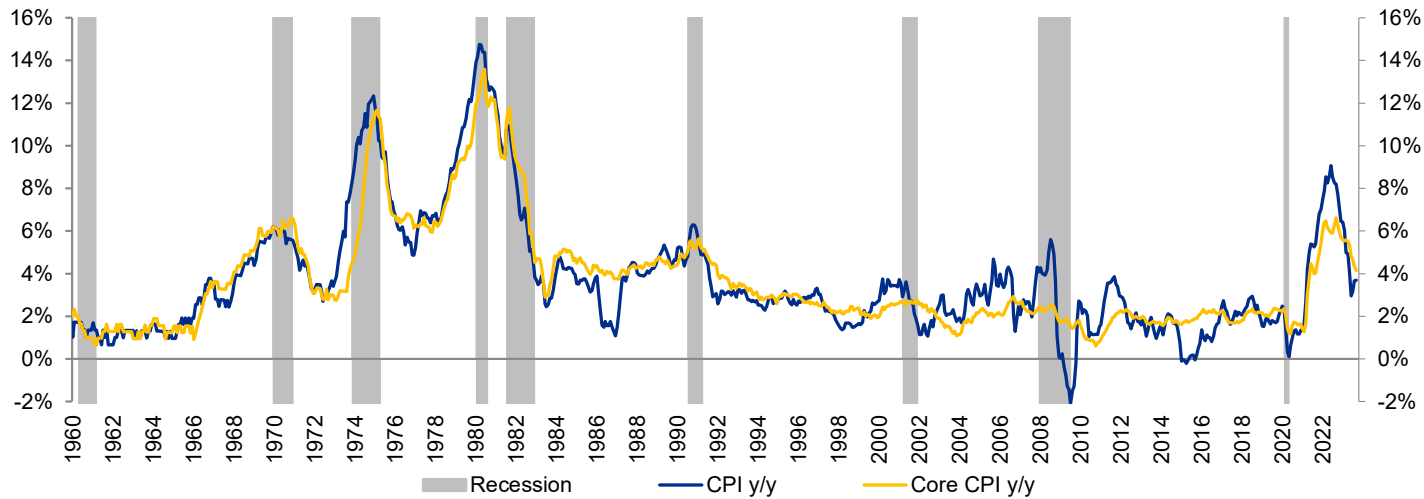
Source: BLS, NBER, Federal Reserve Bank of Minneapolis, Index of Prices Paid by Vermont Farmers for Family Living, Consumer Price Index by Ethel D. Hoover, Cost of Living Index by Albert Rees, DWS Investment GmbH as of 12/6/2023

### Productivity, Wages and Unit Labor Costs



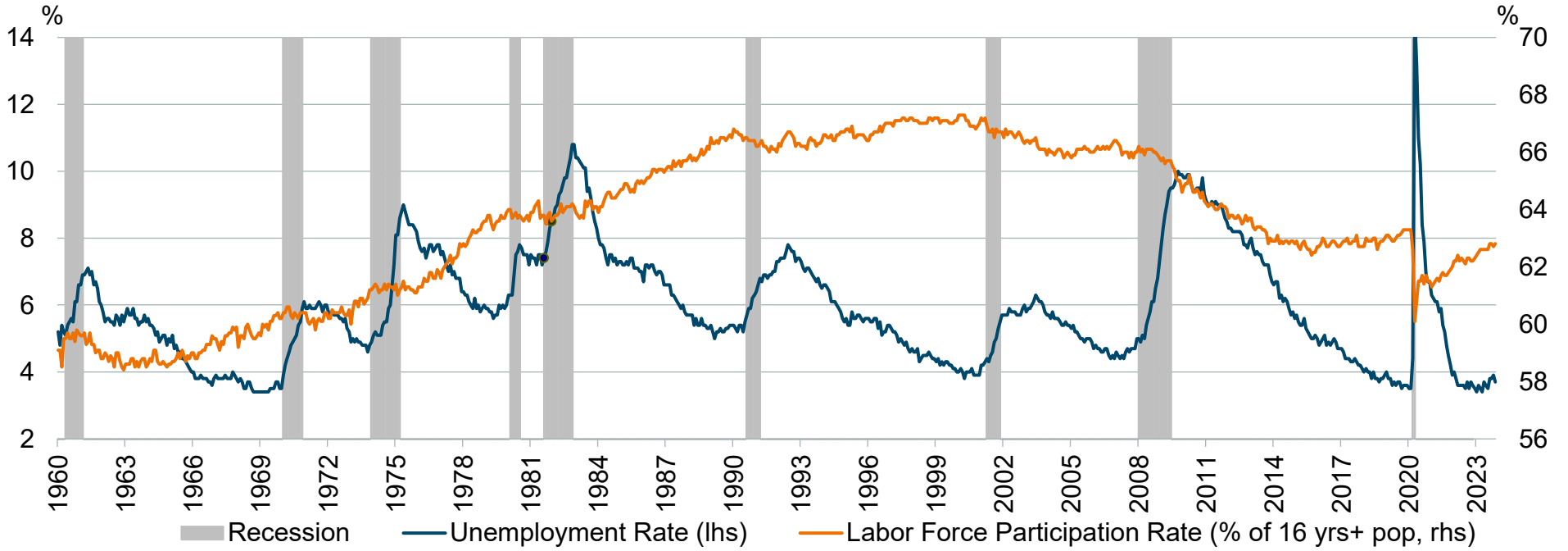
Source: BLS, NBER, Federal Reserve Bank of Minneapolis, Index of Prices Paid by Vermont Farmers for Family Living, Consumer Price Index by Ethel D. Hoover, Cost of Living Index by Albert Rees, DWS Investment GmbH as of 3Q2023

### CPI



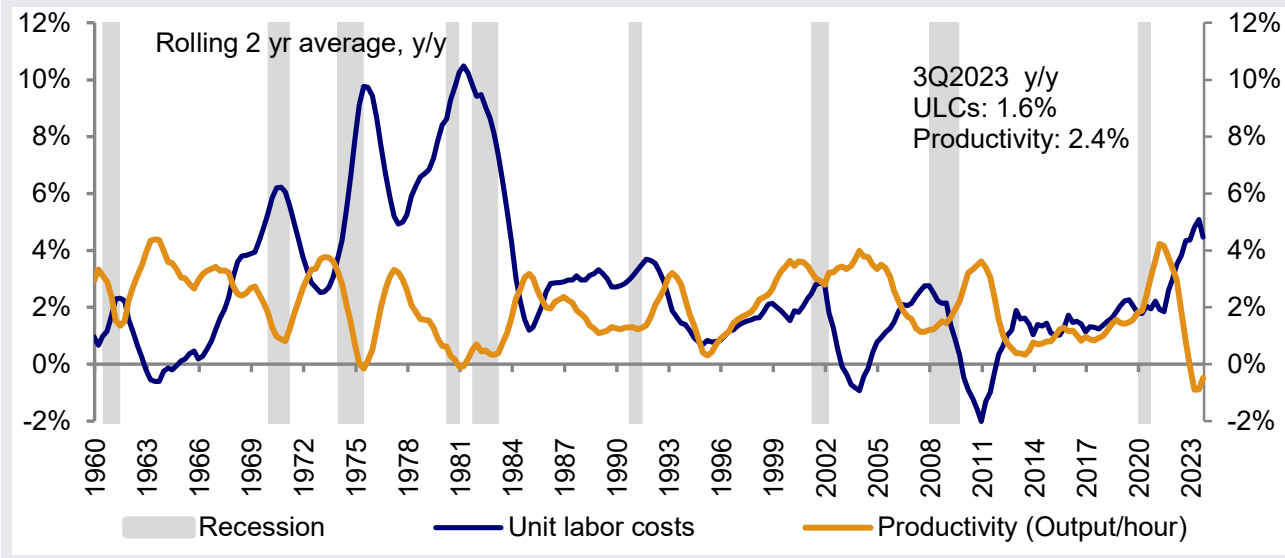
Source: Haver, DWS Investment GmbH as of December 2023

U.S. Unemployment Rate vs. Labor Force Participation Rate



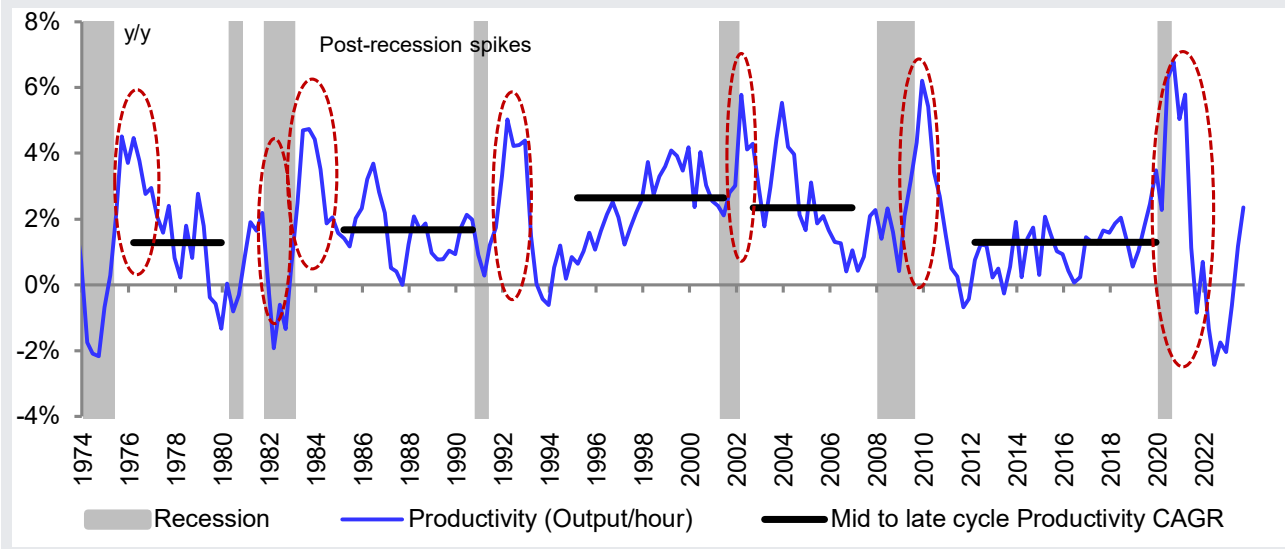
Source: BLS, Haver, DWS Investment GmbH as of 11/30/2023

### Unit Labor Costs vs. Productivity



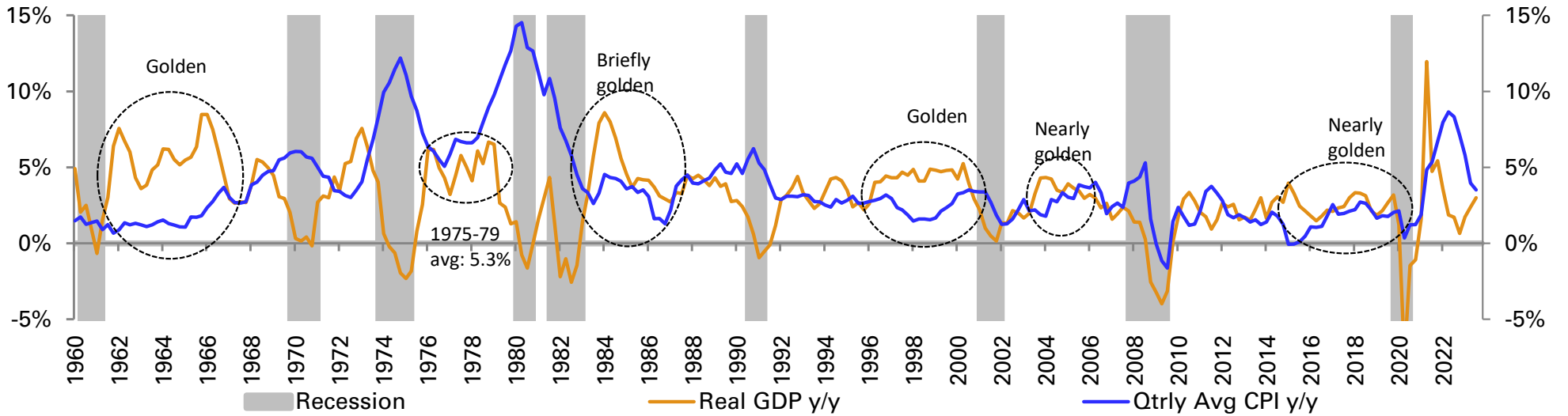
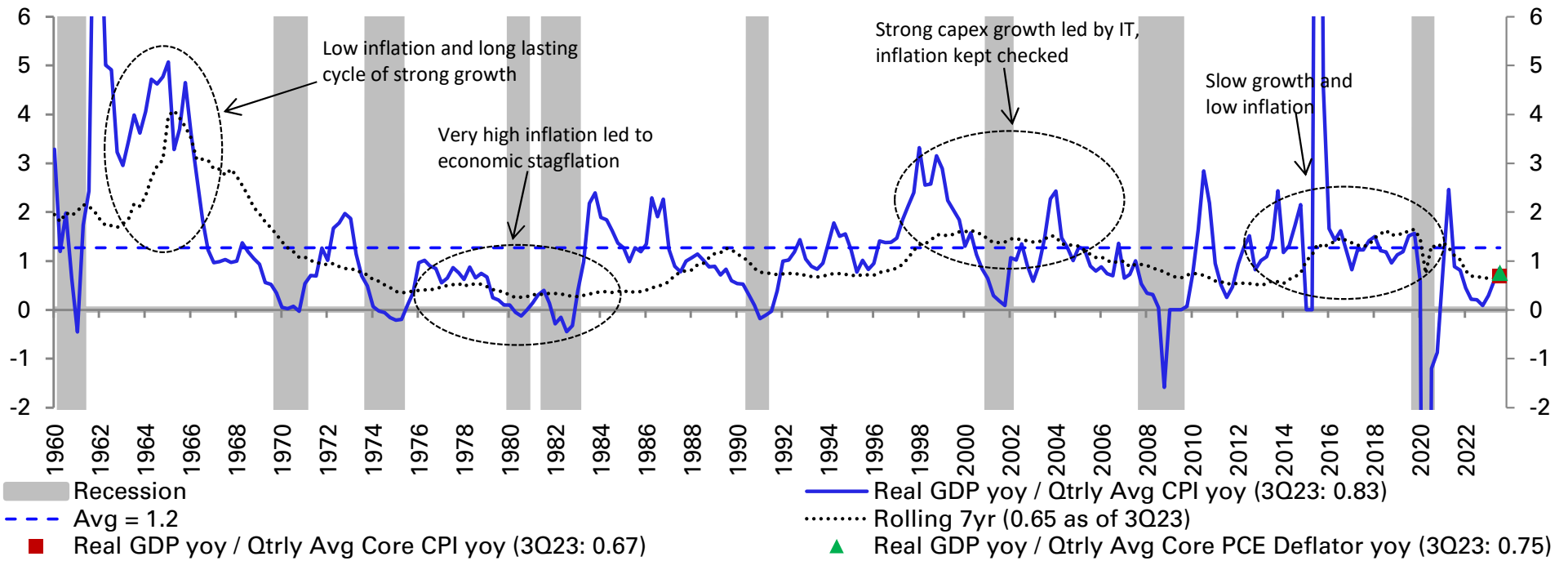
Source: BLS, FRB, DWS Investment GmbH as of 3Q2023. Past performance may not be indicative of future results

### Labor productivity in different cycles



Source: BLS, DWS Investment GmbH as of 3Q2023. Past performance may not be indicative of future results

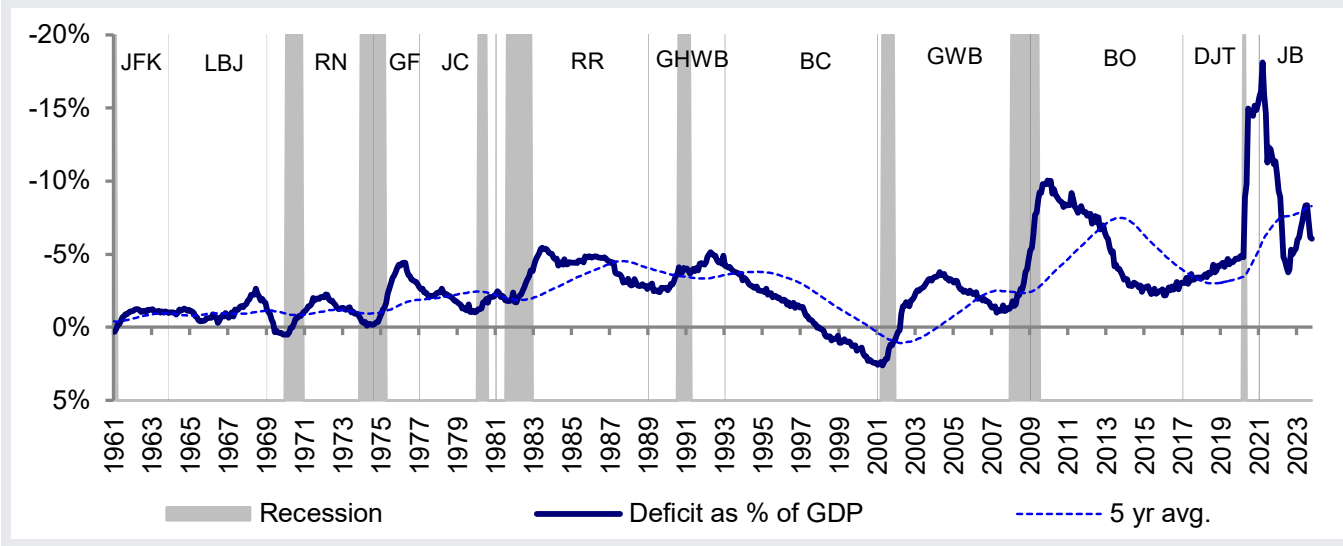
### The Golden Ratio: Real GDP Growth / CPI



Source: Haver, DWS Investment GmbH as of 3Q2023

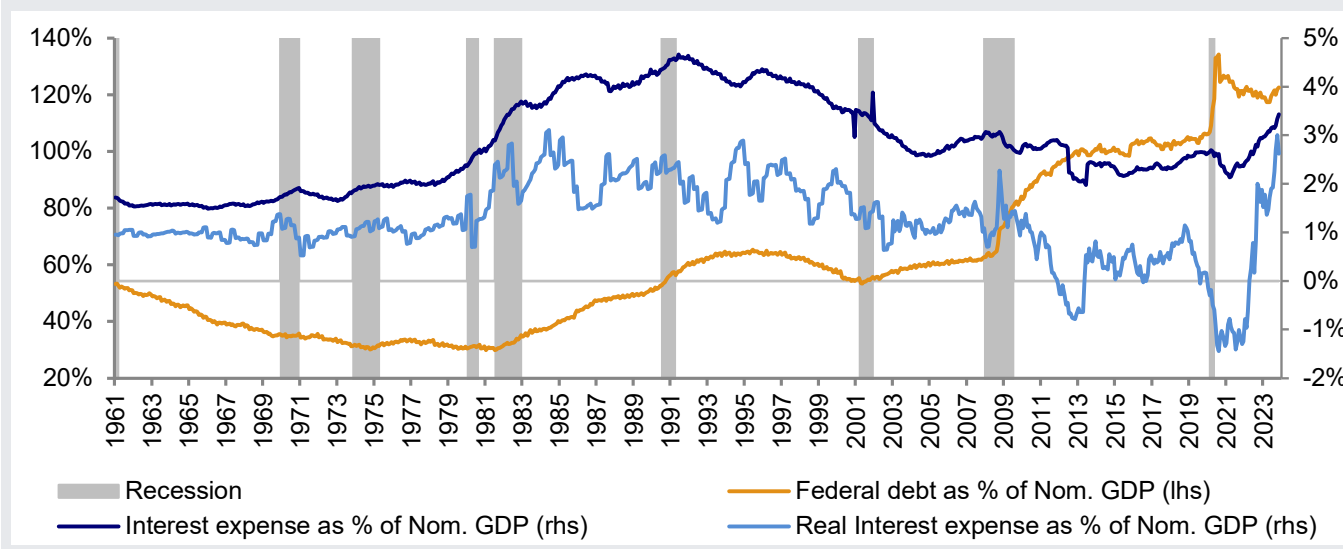


U.S. federal deficit % of GDP



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

U.S. federal debt and interest expense as % of GDP

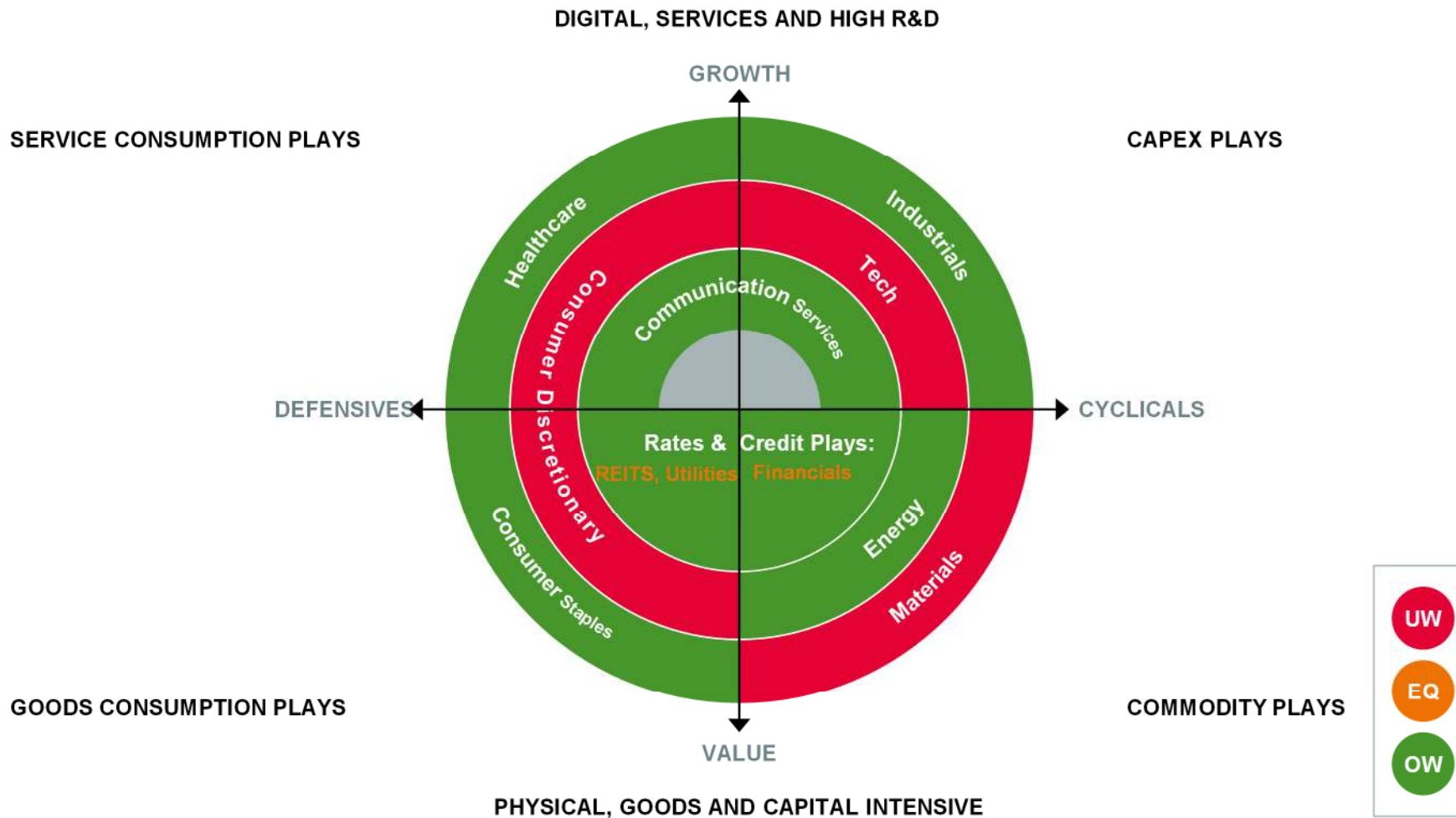


Source: Haver, DWS Investment GmbH as of November 2023. Past performance may not be indicative of future results.

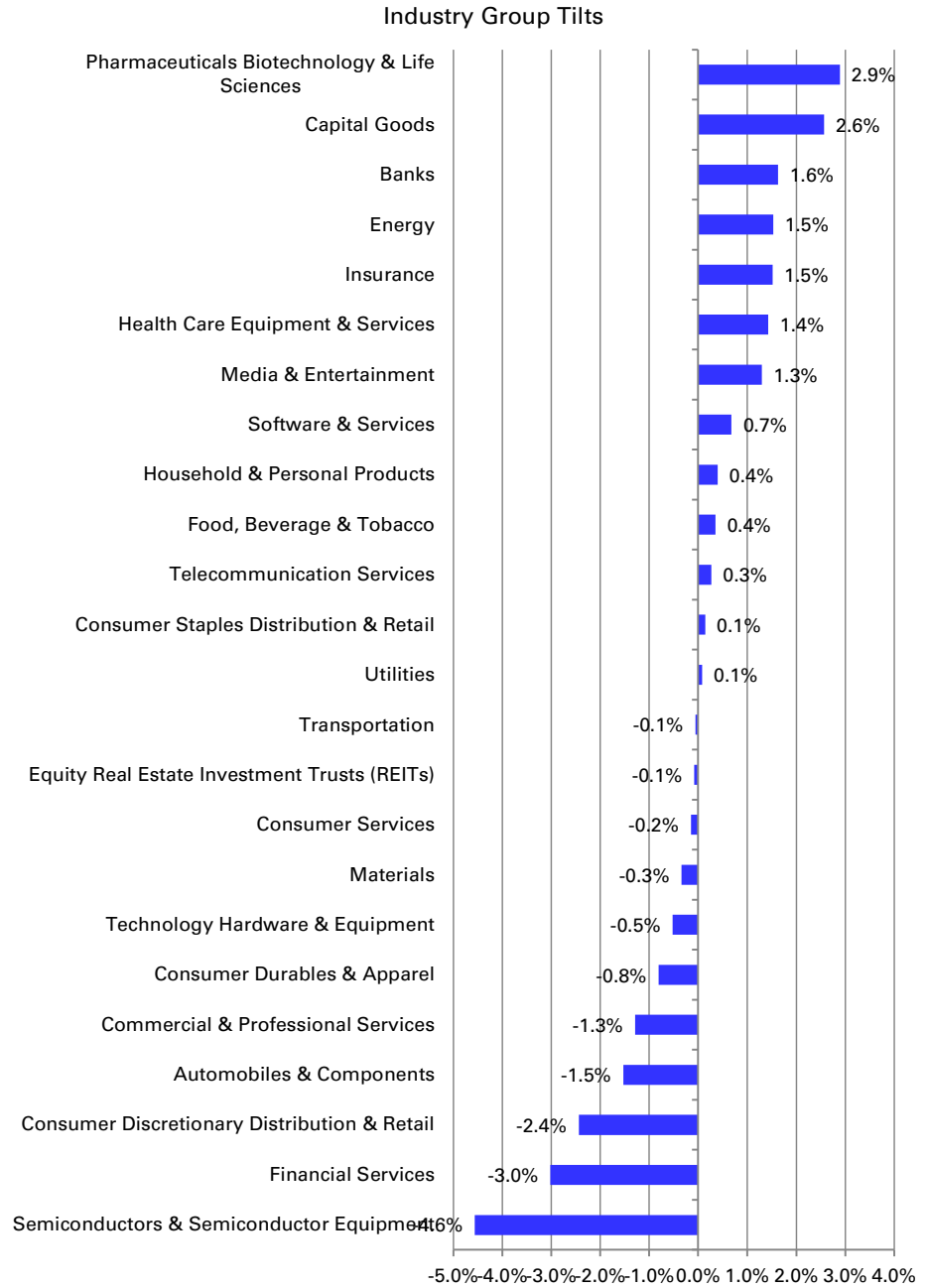
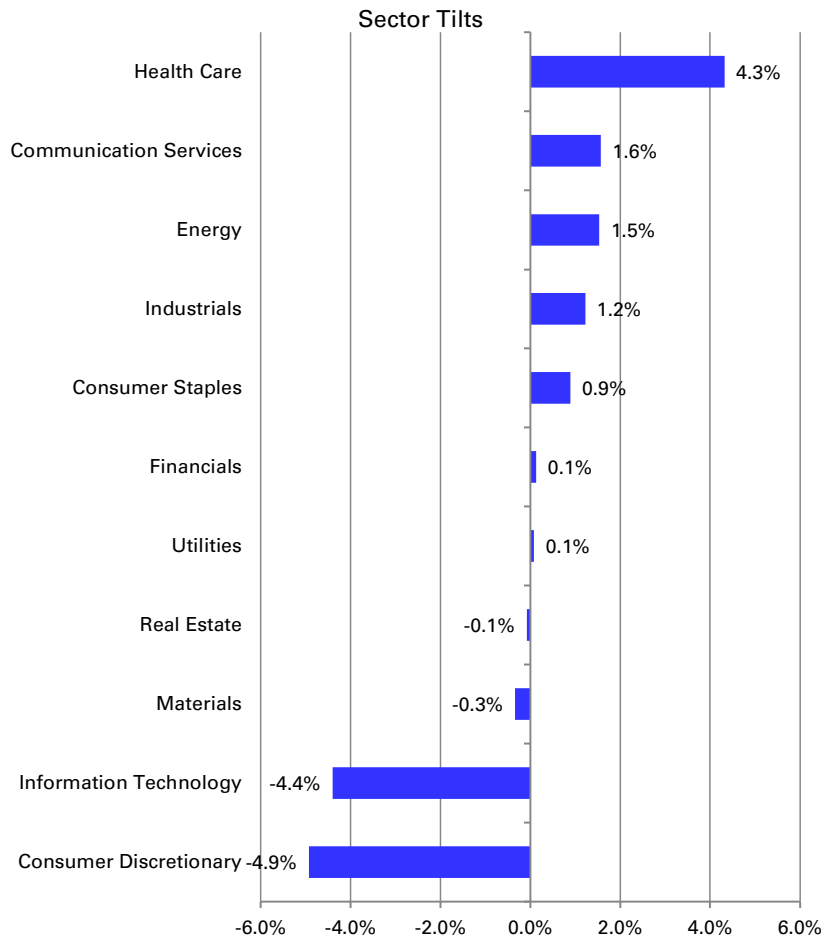
## 7. S&P sector strategy:

With disinflation and a weak macro backdrop seen ahead, we embrace less cyclical and intermediate duration assets, including investment grade credit. In equities, we seek bond substitutes (Utilities, Infrastructure) and secular trends resistant to cyclical disruptions, such as Healthcare in an aging world, productivity enhancers in a tight labor market (Tech Services, Capital Goods). We're cautious on Consumer Goods and now also many Services, but we see further rebound for advertising and airlines. We cut Financials to neutral, with a smaller overweight on big Banks and Insurance and now a small overweight on Energy. We remain overweight Health Care, Communications, Industrials and most underweight Tech and Consumer Discretionary, particularly Semiconductors and Auto. Beyond cyclical risks, car wars will continue and chip wars are next. We expect companies and governments to compete aggressively to ensure a place in electric vehicle and chip making and don't expect shareholder returns prioritized.

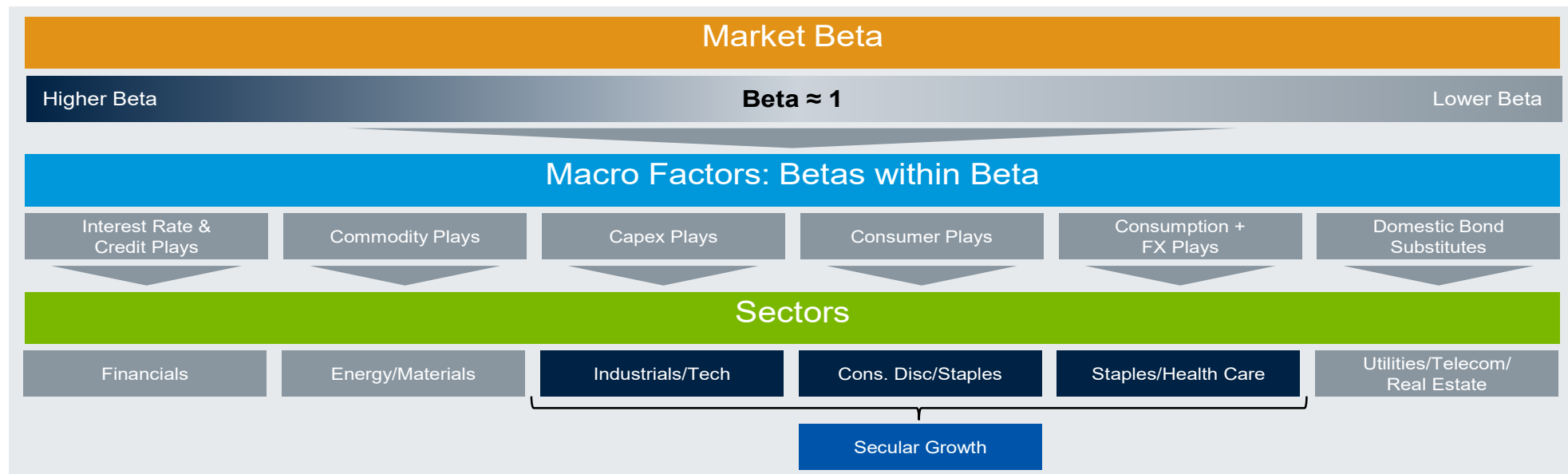
Sector Strategy: Per Key Macro Plays:



Source: DWS Investment GmbH as of December 2023



Source: DWS Investment GmbH as of 12/12/2023



### Total & Undiversifiable Risk Factors

- Volatility
- Beta



### Other Difficult to Diversify Risks

- Size
- Value

### Alpha Factors:



### Macro Factors – Sector Weighting

- Interest rates
- Commodities
- PMIs
- Currencies
- Capex / trade
- Credit Conditions



### Micro Factors – Stock Picking

- Valuations
- Consensus estimates
- ROIC and Economic Profit Analysis
- Operating metrics
- ESG

What's a factor?

A factor is a quantifiable characteristic shared across securities that can help to explain performance. The three classic Fama-French risk factors are: Beta, Size and Value. And, perhaps, Momentum. Quality might lower risk per return. Then there are thousands of metrics (alpha factors) that active managers use to find securities likely to outperform which can't be explained by risk factors.

True alpha must be achieved neutral of risk factors

Historic S&P 500 sector performance

Year	S&P 500	Beta > 1		Beta ≈ 1					Beta < 1				10yr Tsy
		US Value	Global Value		Global Growth		Consumer Growth			Low Beta Defensives			
		Credit Plays	Commodity Plays		Capex Plays		Consumer Plays			Growth	Bond Substitutes		
		Financials	Energy	Materials	Industrials	Tech	Cons. Disc.	Cons. Staples	Health Care	Utilities	Comm.	Real Estate	
1995	37.6%	54.1%	31.0%	20.0%	39.1%	39.4%	20.3%	39.6%	58.0%	32.7%	42.3%		25.4%
1996	23.0%	35.2%	25.9%	15.8%	25.1%	43.9%	12.4%	25.9%	21.0%	5.7%	1.1%		0.0%
1997	33.4%	48.2%	25.3%	8.4%	27.0%	28.5%	34.4%	32.9%	43.7%	24.7%	41.2%		11.9%
1998	28.6%	11.4%	0.6%	-6.2%	10.9%	78.1%	41.1%	15.8%	43.9%	14.8%	52.4%		14.6%
1999	21.0%	4.1%	18.7%	25.3%	21.5%	78.7%	25.2%	-15.1%	-10.7%	-9.2%	19.1%		-7.9%
2000	-9.1%	25.7%	15.7%	-15.7%	5.9%	-40.9%	-20.0%	16.8%	37.1%	57.2%	-38.8%		17.2%
2001	-11.9%	-9.0%	-10.4%	3.5%	-5.7%	-25.9%	2.8%	-6.4%	-11.9%	-30.4%	-12.2%		5.4%
2002	-22.1%	-14.6%	-11.1%	-5.5%	-26.3%	-37.4%	-23.8%	-4.3%	-18.8%	-30.0%	-34.1%	-9.5%	15.4%
2003	28.7%	31.0%	25.6%	38.2%	32.2%	47.2%	37.4%	11.6%	15.1%	26.3%	7.1%	28.8%	0.2%
2004	10.9%	10.9%	31.5%	13.2%	18.0%	2.6%	13.2%	8.2%	1.7%	24.3%	19.9%	28.8%	4.5%
2005	4.9%	6.5%	31.4%	4.4%	2.3%	1.0%	-6.4%	3.6%	6.5%	16.8%	-5.6%	12.6%	3.0%
2006	15.8%	19.2%	24.2%	18.6%	13.3%	8.4%	18.6%	14.4%	7.5%	21.0%	36.8%	41.5%	2.2%
2007	5.5%	-18.6%	34.4%	22.5%	12.0%	16.3%	-13.2%	14.2%	7.2%	19.4%	11.9%	-17.9%	10.4%
2008	-37.0%	-55.3%	-34.9%	-45.7%	-39.9%	-43.1%	-33.5%	-15.4%	-22.8%	-29.0%	-30.5%	-42.3%	20.5%
2009	26.5%	17.2%	13.8%	48.6%	20.9%	61.7%	41.3%	14.9%	19.7%	11.9%	8.9%	27.1%	-10.2%
2010	15.1%	12.1%	20.5%	22.2%	26.7%	10.2%	27.7%	14.1%	2.9%	5.5%	19.0%	32.3%	7.9%
2011	2.1%	-17.1%	4.7%	-9.8%	-0.6%	2.4%	6.1%	14.0%	12.7%	19.9%	6.3%	11.4%	16.1%
2012	16.0%	28.8%	4.6%	15.0%	15.3%	14.8%	23.9%	10.8%	17.9%	1.3%	18.3%	19.7%	2.7%
2013	32.4%	35.6%	25.1%	25.6%	40.7%	28.4%	43.1%	26.1%	41.5%	13.2%	11.5%	1.6%	-8.5%
2014	13.7%	15.2%	-7.8%	6.9%	9.8%	20.1%	9.7%	16.0%	25.3%	29.0%	3.0%	30.2%	10.6%
2015	1.4%	-1.5%	-21.1%	-8.4%	-2.5%	5.9%	10.1%	6.6%	6.9%	-4.8%	3.4%	4.7%	1.1%
2016	12.0%	22.8%	27.4%	16.7%	18.9%	13.8%	6.0%	5.4%	-2.7%	16.3%	23.5%	3.4%	0.1%
2017	21.8%	22.2%	-1.0%	23.8%	21.0%	38.8%	23.0%	13.5%	22.1%	12.1%	-1.3%	10.8%	2.7%
2018	-4.4%	-13.0%	-18.1%	-14.7%	-13.3%	-0.3%	0.8%	-8.4%	6.5%	4.1%	-12.5%	-2.2%	0.3%
2019	31.5%	32.1%	11.8%	24.6%	29.4%	50.3%	27.9%	27.6%	20.8%	26.3%	32.7%	29.0%	9.3%
2020	18.4%	-1.7%	-33.7%	20.7%	11.1%	43.9%	33.3%	10.7%	13.4%	0.5%	23.6%	-2.2%	10.4%
2021	28.7%	35.0%	54.6%	27.3%	21.1%	34.5%	24.4%	18.6%	26.1%	17.7%	21.6%	46.2%	-4.1%
2022	-18.1%	-10.5%	65.7%	-12.3%	-5.5%	-28.2%	-37.0%	-0.6%	-2.0%	1.6%	-39.9%	-26.1%	-16.4%
2023*	20.8%	6.4%	-1.3%	7.6%	10.4%	52.0%	34.2%	-2.1%	-2.2%	-8.8%	48.7%	3.4%	-0.6%

Return vs. S&P

Outperform

Underperform

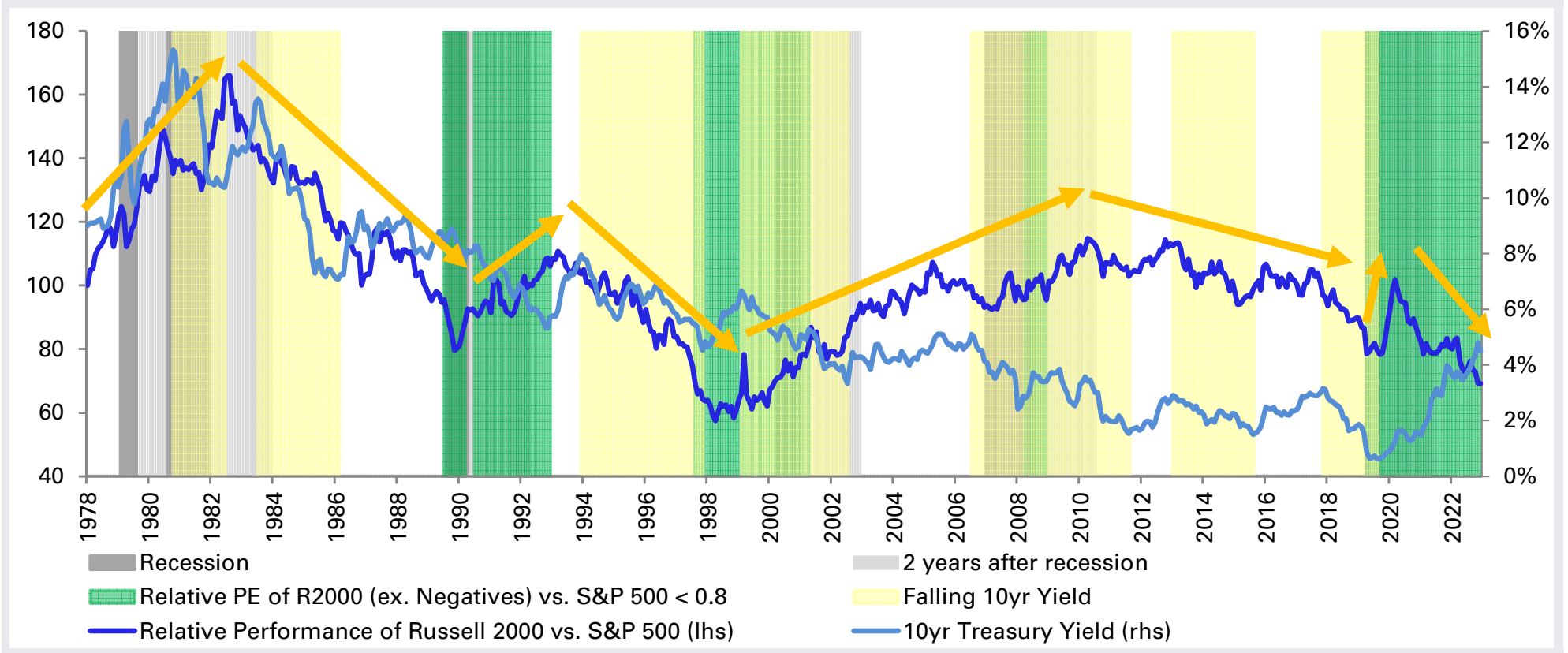
\* 2023 returns are as of 11/30/2023

Source: S&P, Treasury, DWS Investment GmbH as of December 2023

8. A better relative decade likely for small vs. large caps:

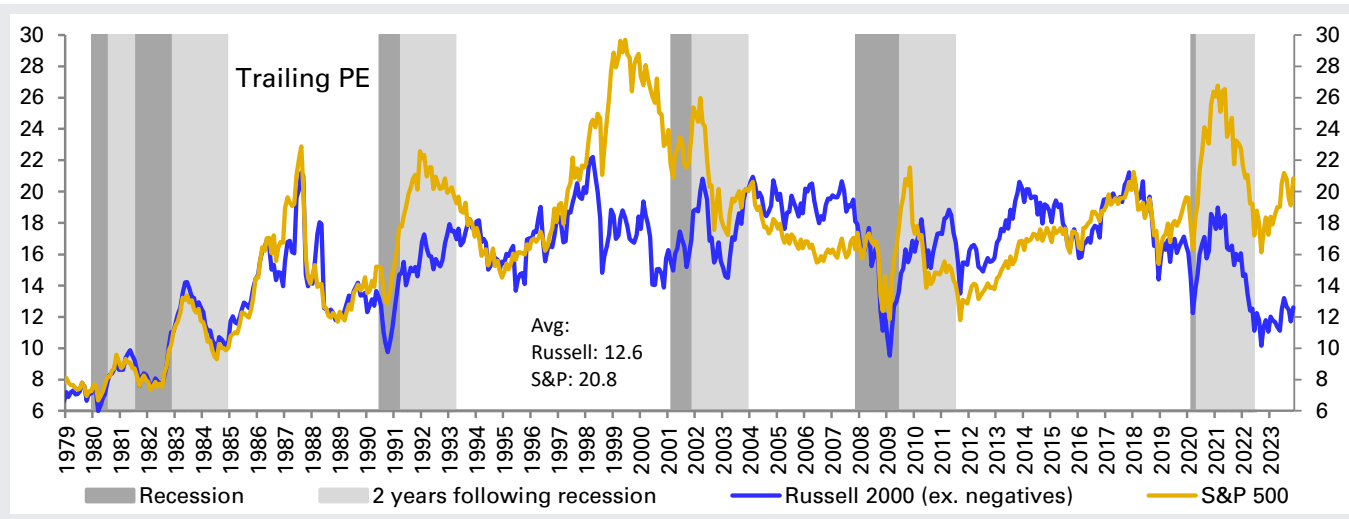
Competitive U.S. corp tax rates, strong/ stable dollar, normal interest rates and reshoring suggests better small vs. large cap performance.

Trailing PE of Russell 2000 ex non-earners vs. number of non-earners



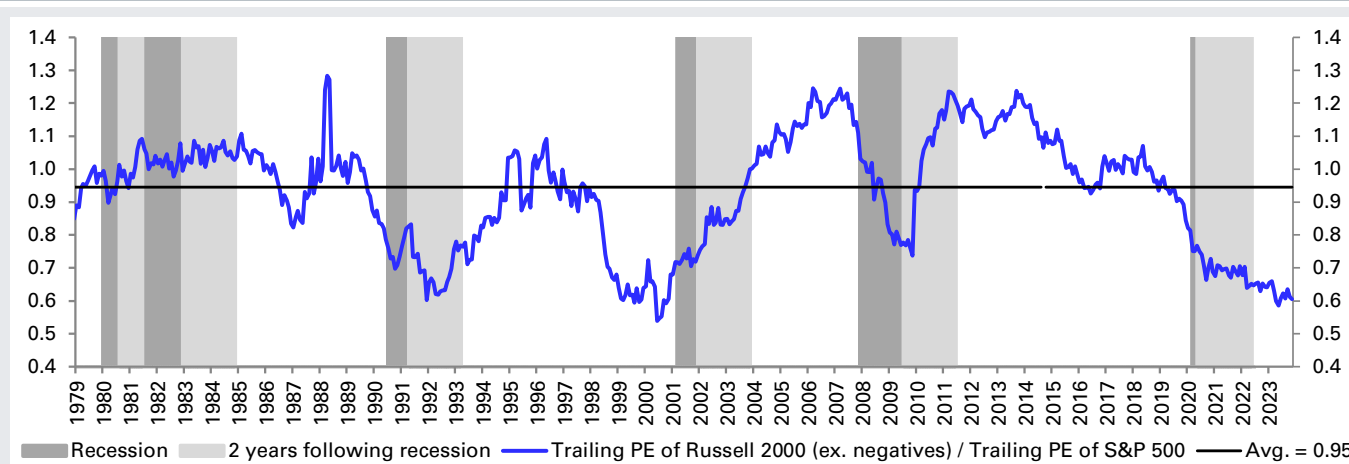
Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

### Trailing PE of Russell 2000 ex non-earners vs. S&P 500



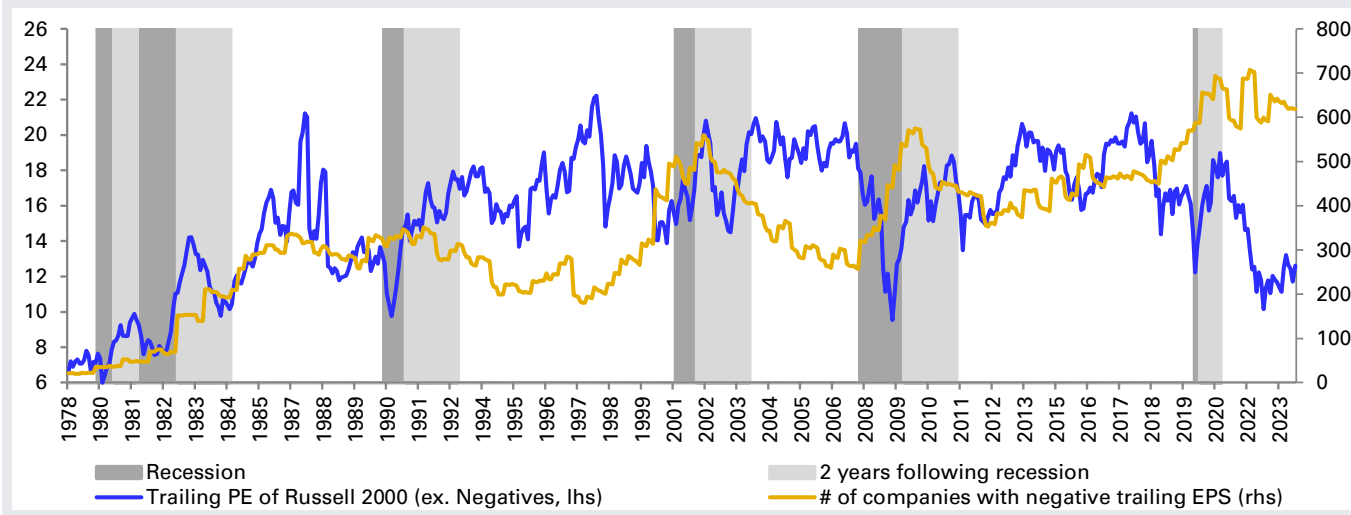
Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

### Relative trailing PE of Russell 2000 ex non-earners vs. S&P 500



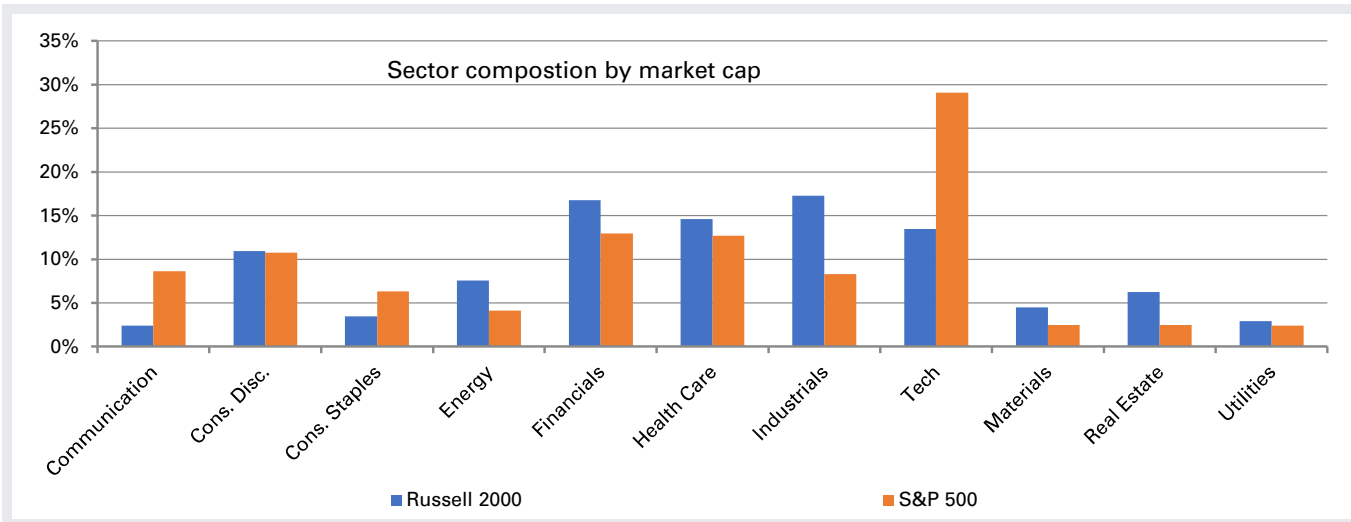
Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

### Trailing PE of Russell 2000 ex non-earners vs. number of non-earners



Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

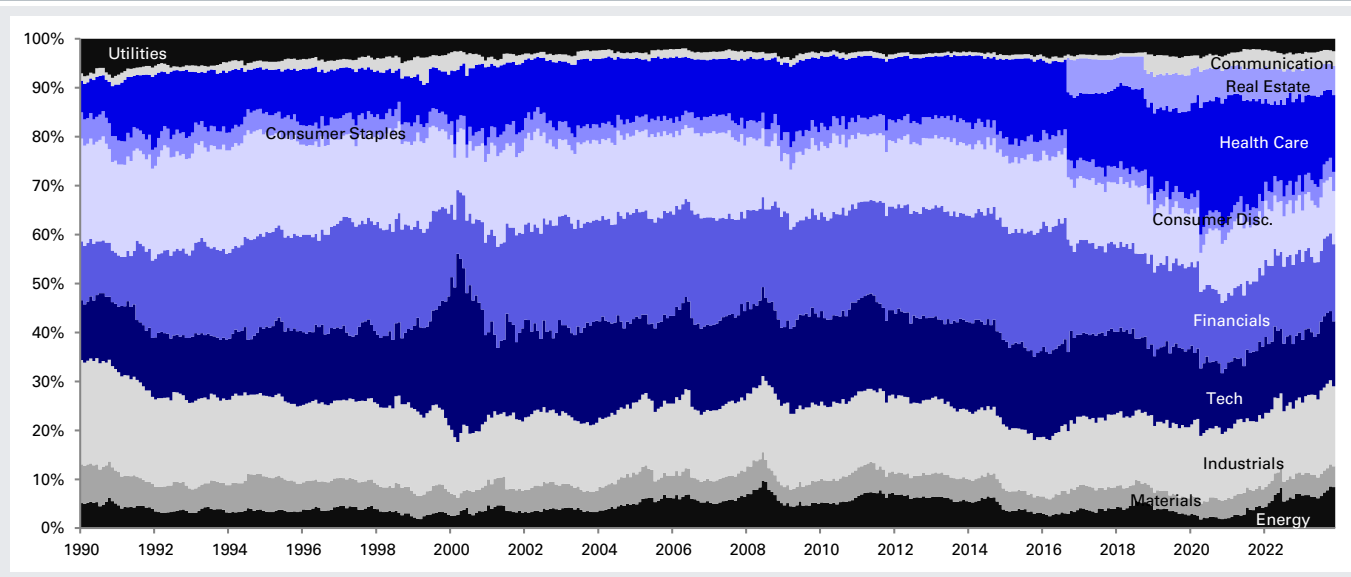
### Index sector composition of Russell 2000 vs. S&P 500



Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

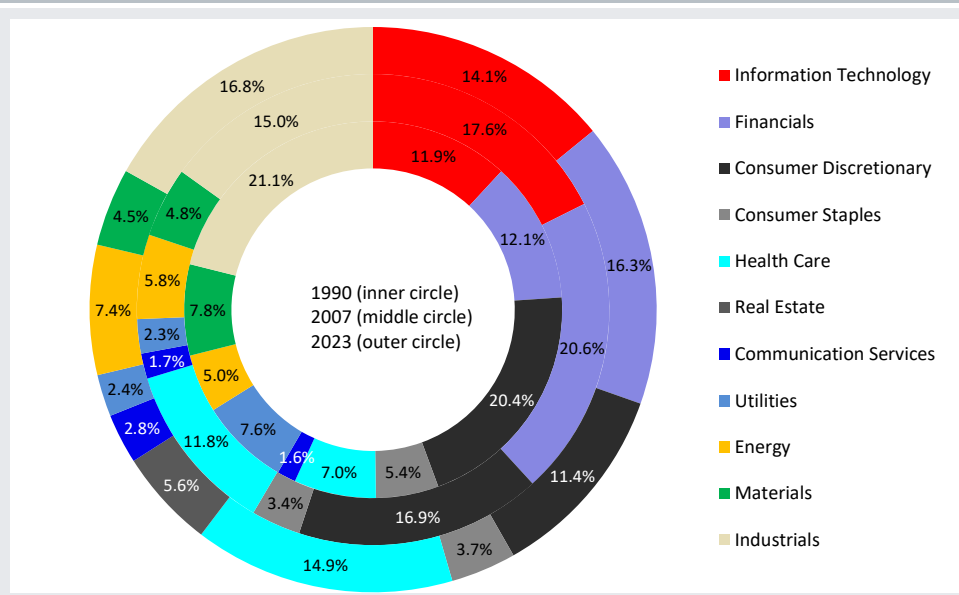


### Historic Russell 2000 sector composition



Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

### Index sector composition of Russell 2000

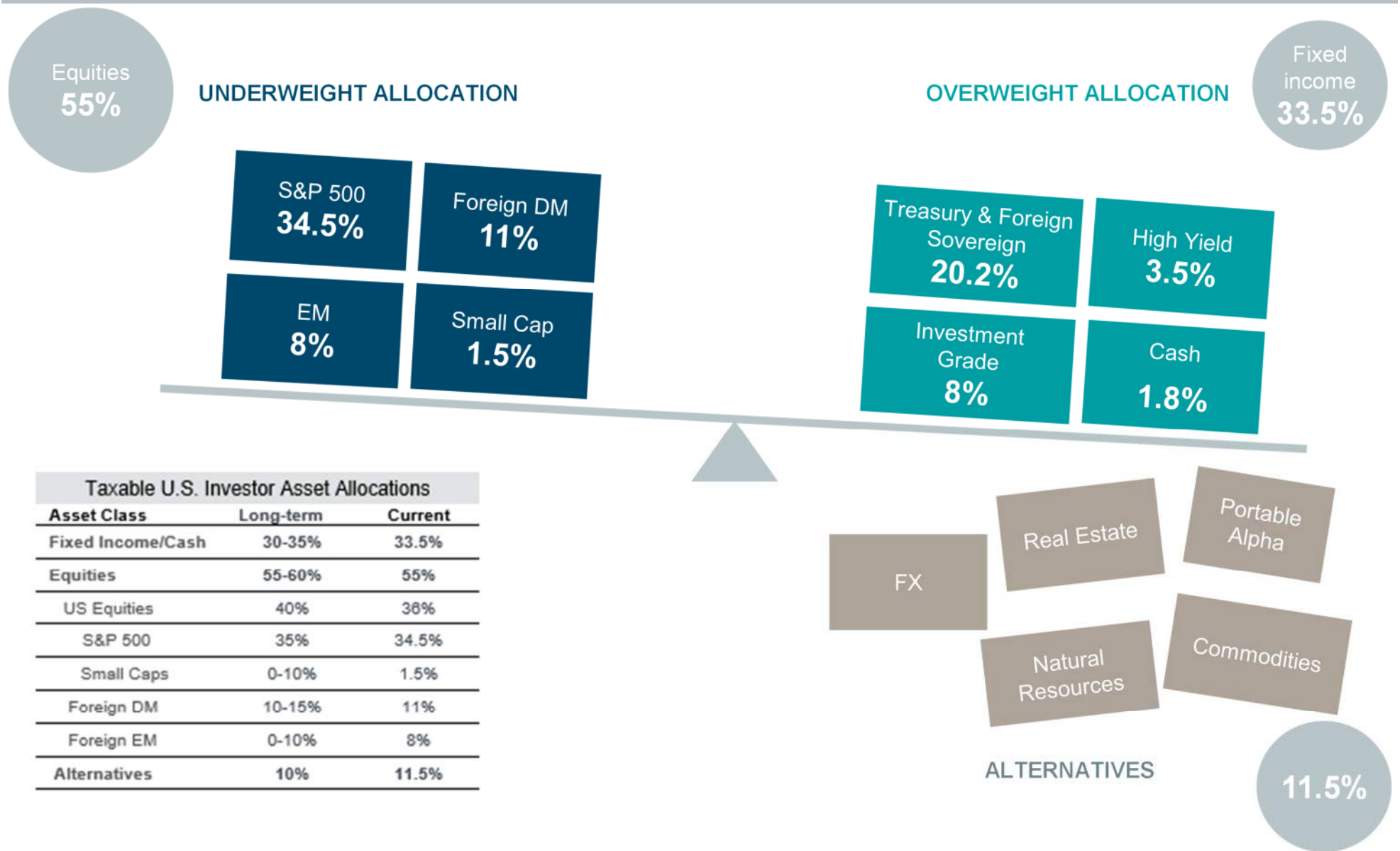


Source: Compustat, DWS Investment GmbH as of 11/30/2023. Past performance may not be indicative of future results.

9. Keep foreign equities in the portfolio, search for value and lower correlations:

The 5 largest companies are 25% of the S&P 500, thus we value diversification. Europe & Japan are value tilted with less Tech. We keep modest exposure to China's Tech firms heavily discounted for gov't risk.

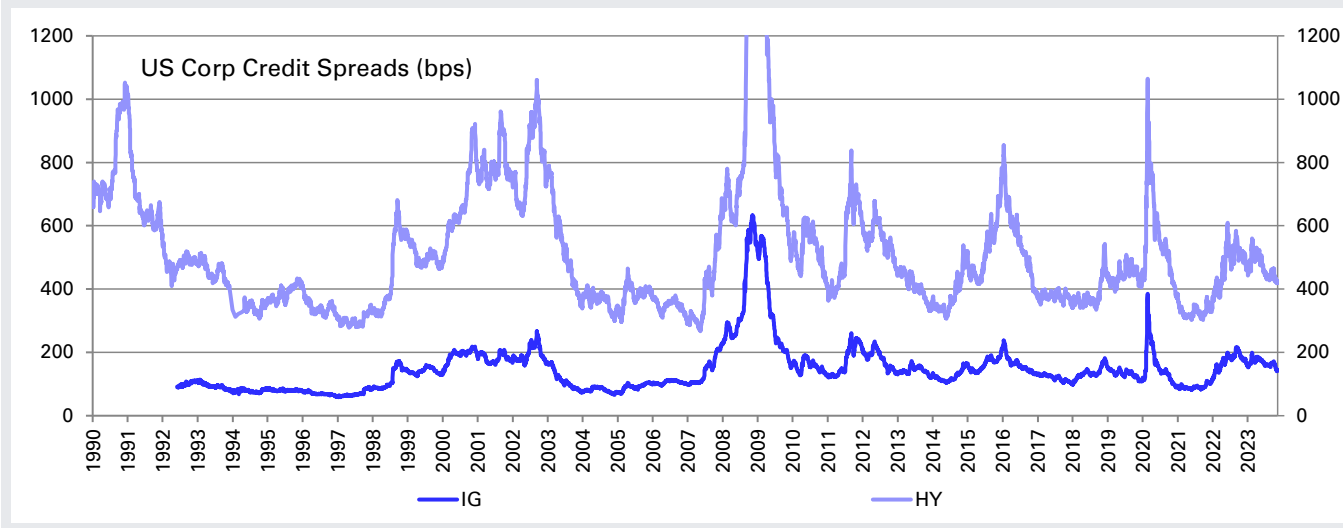
DWS view: allocations for taxable / USD capital



Source: DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

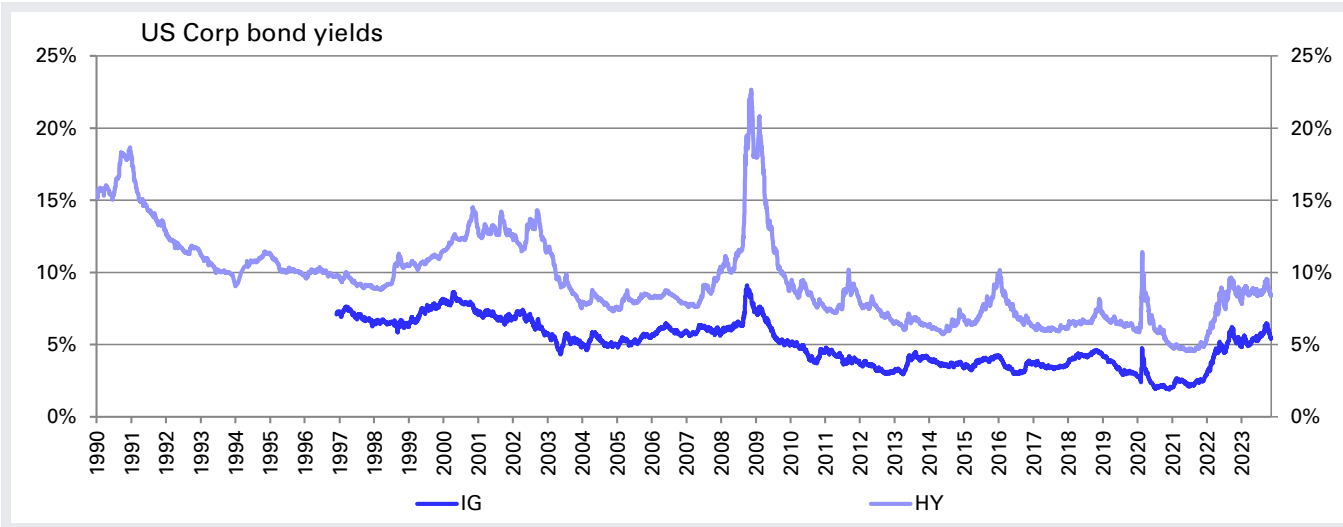
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### Corporate Investment Grade and High Yield spreads



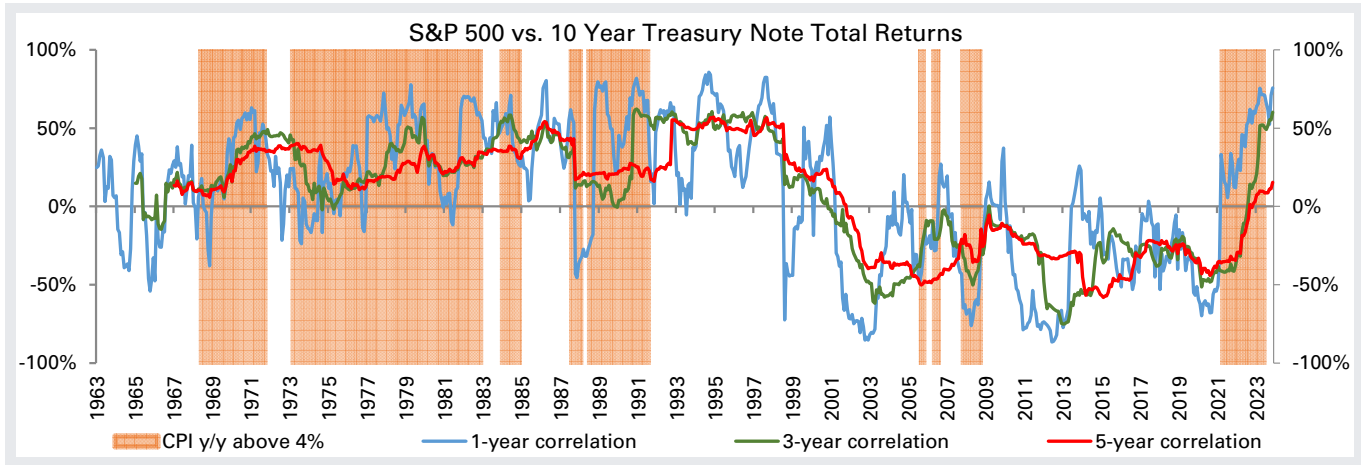
Source: BAML, FRB, Bloomberg, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

### U.S. Corporate bond yields: Investment Grade and High Yield



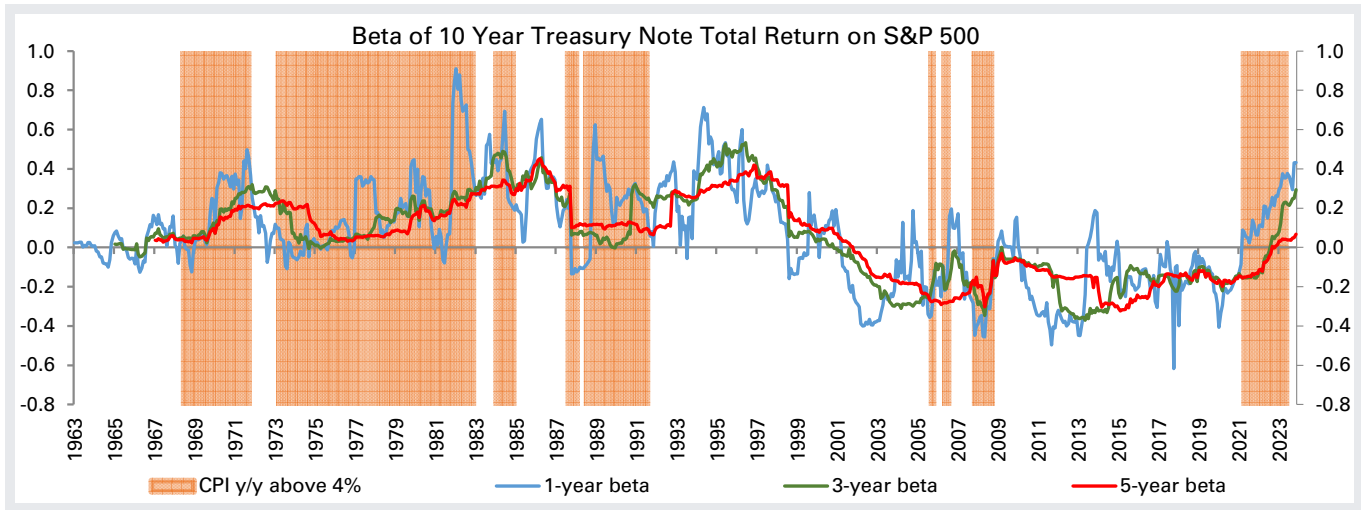
Source: BAML, Haver, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

Correlation of S&P 500 and 10-year treasury note returns



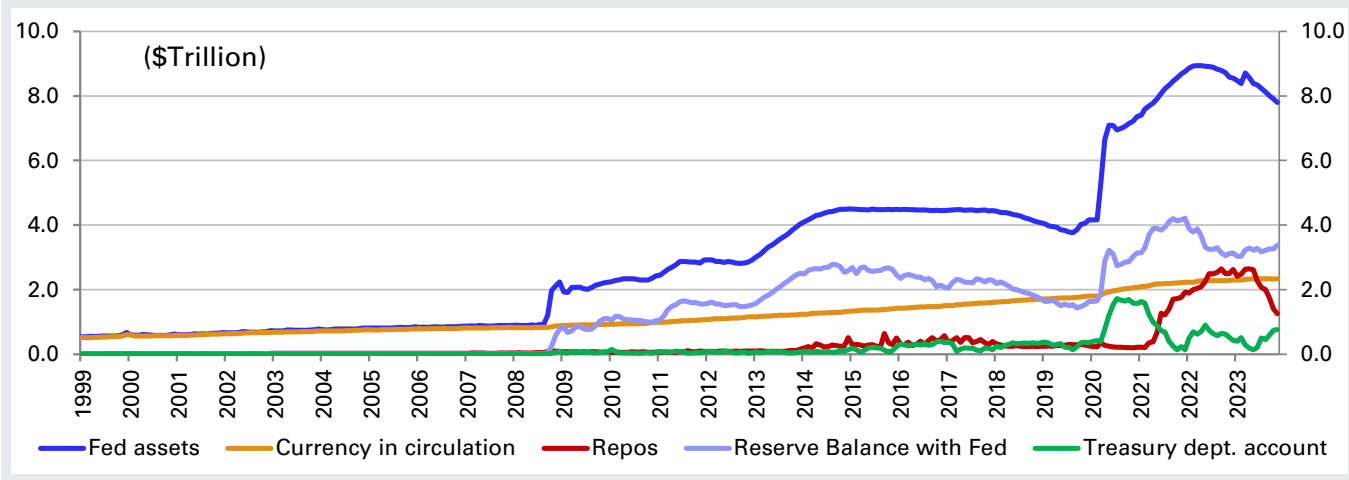
Source: Haver, DWS Investment GmbH as of 11/30/20223

Beta of 10-year treasury note on S&P 500



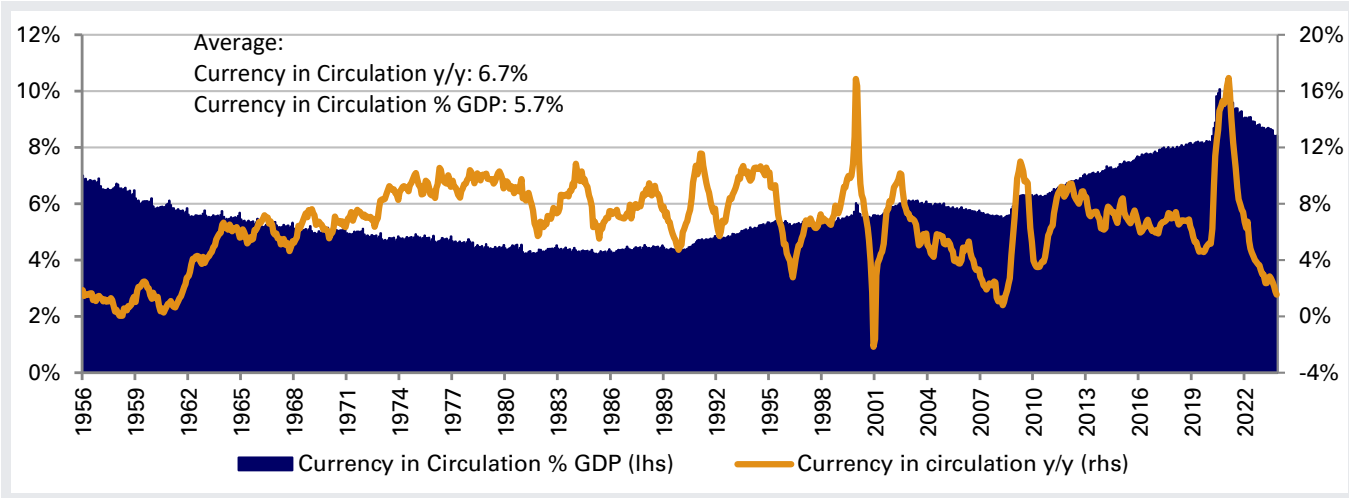
Source: Haver, DWS Investment GmbH as of 11/30/2023

Federal Reserve assets and key liabilities, currency in circulation, bank reserves at Fed and Treasury account



Source: FDIC, Haver, DWS Investment GmbH as of November 2023. Past performance may not be indicative of future results.

U.S. currency in circulation growth rate and as % of GDP

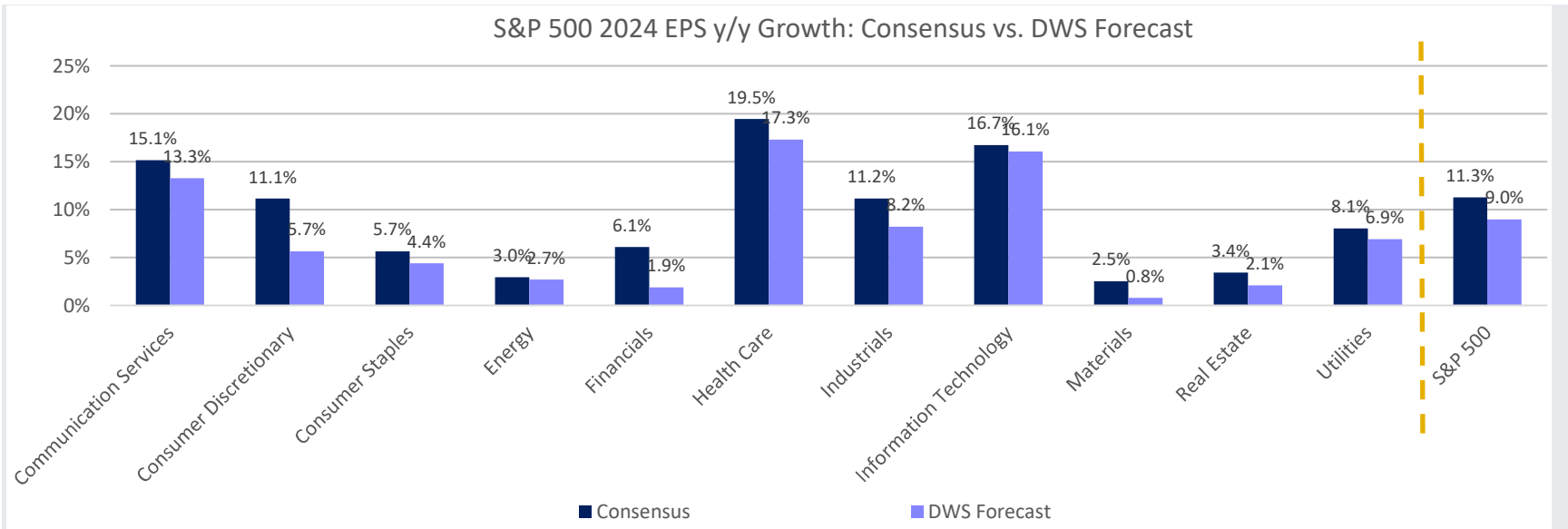


Source: Haver, DWS Investment GmbH as of November 2023. Past performance may not be indicative of future results.

## 10. 2024 chutes & ladders:

Negative: Recession or <5% S&P EPS growth, destabilizing U.S. election results. Positives: S&P EPS growth >10%, 10yr Treasury yield <4% and no recession.

### S&P 500 2024 EPS growth: consensus vs. DWS forecast



Source: Factset, DWS Investment GmbH as of 12/8/2023. Past performance may not be indicative of future results.

### DWS inflation forecasts

#### Inflation (CPI)

% year-on-year average

	2022	2023F	2024F	Consensus 2023 (BBG)
World				5.5 (5.3)
U.S.**	8.0	4.2 (4.1)	2.8 (2.6)	4.2 (4.1)
EUZ	8.4	5.7	2.9 (2.5)	5.5
GER	8.6	6.0	3.2	6.0 (6.2)
UK	9.1	7.3 (7.4)	2.8 (2.6)	7.5 (6.6)
Japan	2.5	3.2 (2.9)	2.3 (1.9)	2.9
China	2.0	0.5	1.8 (2.0)	0.8 (2.1)

Source: DWS Investment GmbH as of December 2023. Past performance may not be indicative of future results.

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## Appendix:

### S&P 500 Bear Markets & Recoveries

Bear Markets	Date of S&P trough	Peak to trough (% decline)	Recovery (trough to high price in the month of mkt anniversary)					Date of peak recovered	Years
			1 year	2 year	3 year	4 year	5 year		
1 1929-32	Jun/1932	-86%	155%	126%	142%	254%	277%	Sep/1954	22.3
2 1937-38	Apr/1938	-54%	46%	44%	17%	-4%	40%	Apr/1946	8.0
3 1939-42	May/1942	-43%	62%	70%	102%	150%	99%	Jan/1945	2.7
4 1946-49	Jun/1949	-30%	38%	62%	85%	83%	122%	Oct/1950	1.3
5 1956-57	October 22, 1957	-22%	37%	48%	44%	84%	56%	September 24, 1958	0.9
6 1961-62	June 26, 1962	-28%	34%	61%	64%	67%	80%	September 4, 1963	1.2
7 1966	October 7, 1966	-22%	32%	48%	29%	23%	35%	May 4, 1967	0.6
8 1969-70	May 26, 1970	-36%	46%	60%	56%	34%	34%	March 6, 1972	1.8
9 1973-74	October 3, 1974	-48%	46%	67%	54%	69%	79%	July 17, 1980	5.8
10 1980-82	August 12, 1982	-27%	64%	64%	85%	148%	229%	November 3, 1982	0.2
11 1987 Crash	October 19, 1987	-33%	26%	54%	43%	75%	88%	July 26, 1989	1.8
12 1990-91	October 11, 1990	-20%	33%	43%	59%	60%	100%	February 13, 1991	0.3
13 1998	August 31, 1998	-19%	42%	59%	18%	-5%	9%	November 23, 1998	0.2
14 2000-2002	October 9, 2002	-49%	36%	50%	57%	79%	101%	May 30, 2007	4.6
15 2007-09	March 9, 2009	-57%	77%	97%	110%	132%	179%	March 28, 2013	4.1
Average		-38%	52%	64%	64%	83%	96%		3.72
Average ex. great depression		-35%	44%	59%	59%	71%	82%		2.27

Source: S&P, Haver, DWS Investment GmbH as of December 2023

U.S. bear markets since 1929

	1929-32	1937-38	1939-42	1946-49	1956-57	1961-62	1969-70	1973-74	1980-82	1987	1990-91	2000-02	2007-09	Avg (1960-2009)
S&P price at peak	31.86	18.67	13.21	19.25	49.74	72.64	108.37	120.24	140.52	336.77	368.95	1527.46	1562.47	
S&P price at trough	4.400	8.5	7.47	13.55	38.98	52.34	69.29	62.28	102.42	223.92	295.46	776.76	676.53	
Peak to trough % decline	-86%	-54%	-43%	-30%	-22%	-28%	-36%	-48%	-27%	-34%	-20%	-49%	-57%	-37%
Quarter of S&P peak	3Q29	1Q37	4Q39	2Q46	3Q56	4Q61	4Q68	1Q73	4Q80	3Q87	3Q90	1Q00	4Q07	
Quarter of S&P trough	2Q32	1Q38	2Q42	2Q49	4Q57	2Q62	2Q70	4Q74	3Q82	4Q87	4Q90	4Q02	1Q09	
Trailing 4-qr EPS at S&P peak (\$/sh)	1.61	1.11	0.90	0.84	3.46	3.19	5.76	6.80	14.82	18.57	23.57	51.02	84.56	
Trailing 4-qr EPS at S&P trough (\$/sh)	0.41	0.97	0.98	2.40	3.37	3.47	5.52	8.89	13.64	20.50	22.48	47.98	55.72	
Change in EPS (%)	-75%	-13%	9%	186%	-3%	9%	-4%	31%	-8%	10%	-5%	-6%	-34%	-1%
Forward 4-qr EPS (\$/sh)	0.44	0.71	1.10	2.54	2.89	3.84	5.32	7.96	13.30	24.12	18.48	55.51	68.90	
Trailing 4-qr PE at S&P peak	19.8	16.8	14.7	22.9	14.4	22.8	18.8	17.7	9.5	18.1	15.7	29.9	18.5	18.9
Trailing 4-qr PE at S&P trough	10.7	8.8	7.6	5.6	11.6	15.1	12.6	7.0	7.5	10.9	13.1	16.2	12.1	11.8
Forward 4-qr PE at S&P trough	10.0	12.0	6.8	5.3	13.5	13.6	13.0	7.8	7.7	9.3	16.0	14.0	9.8	11.4
US short-term rates*	0.8%	0.1%	0.3%	1.2%	3.3%	2.7%	6.7%	7.4%	12.4%	5.9%	7.0%	1.3%	0.2%	5.4%
US 10yr Treasury yield **	3.4%	2.7%	2.4%	2.4%	3.3%	4.0%	7.7%	7.4%	14.4%	8.8%	8.1%	3.8%	2.7%	7.1%
US Real 10yr Treasury yield ***						2.0%	3.7%	3.4%	8.7%	4.3%	4.08%	1.33%	1.71%	3.7%
Inflation (CPI last 12mo, %)	-10.3%	0.0%	12.2%	-0.3%	3.0%	1.3%	6.0%	12.2%	6.8%	4.5%	6.2%	2.2%	0.0%	4.9%
Dividend yield	10.1%	9.2%	8.0%	7.2%	4.5%	3.8%	4.4%	5.3%	6.2%	3.6%	3.7%	1.8%	3.4%	4.0%
Dividend yield less short-term rates	9.3%	9.1%	7.7%	6.0%	1.2%	1.0%	-2.3%	-2.1%	-6.2%	-2.3%	-3.3%	0.5%	3.2%	-1.4%
EPS yield	9.3%	11.4%	13.1%	17.7%	8.6%	6.6%	8.0%	14.3%	13.3%	9.2%	7.6%	6.2%	8.2%	9.2%
EPS yield less 10yr Tsy yield	6.0%	8.7%	10.7%	15.3%	5.3%	2.6%	0.3%	6.9%	-1.1%	0.3%	-0.5%	2.3%	5.5%	2.0%
EPS yields less real 10yr Tsy yield						4.6%	4.3%	10.9%	4.6%	4.8%	3.5%	4.8%	6.5%	5.5%
Last 10yrs total return (CAGR, %)	-1.4%	-2.7%		8.7%	16.5%	12.7%	5.9%	1.2%	5.7%	15.2%	14.0%	9.3%	-3.0%	9.2%
Next 10 yrs total return (CAGR, %)	12.4%	11.9%	18.2%	21.5%	12.9%	10.5%	9.1%	14.9%	17.6%	18.1%	17.5%	7.1%	?	13.5%
Quarter of S&P trailing 4-qr EPS trough	1932	3Q38		2Q46	3Q58	2Q61	4Q70	4Q75	1Q83		4Q91	1Q02	3Q09	
Trough EPS (\$/sh)	0.41	0.62		0.84	2.88	3.03	5.13	7.76	12.42		18.48	44.19	50.84	
Peak to trough EPS (% chg)	-75%	-49%		-29%	-22%	-12%	-13%	-15%	-19%		-28%	-23%	-45%	-22%
Quarter of GDP trough	1933	4Q38		3Q47	1Q58	4Q60	4Q70	1Q75	3Q82		1Q91	1Q01	2Q09	
Peak to trough Real GDP (% chg)	-26.3%	-3.3%		-13.8%	-3.6%	-1.3%	-1.0%	-3.1%	-2.6%		-1.3%	-0.3%	-4.2%	-2.0%

Note: More bear markets and recessions related exhibits can be found in the appendix section.

Source: S&P, DWS Investment GmbH as of December 2022



## Declines of S&P 500 cyclical sector earnings during recessions

S&P 500	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	3%	-7%	
1974	29%	11%	-8%	
1980	23%	0%	8%	
1982	8%	-15%	10%	
1990	-6%	-4%	N/A	
1991	N/A	-15%	13%	
2001	14%	-19%	7%	
2008	-5%	-29%	N/A	
2009	N/A	-1%	48%	
2020	1%	-9%	46%	
Average	9%	-10%	46%	

Consumer Discretionary	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	-5%	-28%	
1974	15%	-38%	16%	
1980	-8%	-75%	125%	
1982	125%	23%	102%	
1990	-1%	-45%	N/A	
1991	N/A	-72%	224%	
2001	-5%	-35%	37%	
2008	-13%	-59%	N/A	
2009	N/A	118%	46%	
2020	-2%	-21%	68%	
Average	16%	-41%	94%	

Financials	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	11%	-1%	
1974	39%	-16%	-6%	
1980	20%	0%	-6%	
1982	-6%	-2%	16%	
1990	-39%	30%	N/A	
1991	N/A	12%	35%	
2001	11%	-12%	19%	
2008	-37%	-159%	N/A	
2009	N/A	122%	597%	
2020	3%	-21%	66%	
Average	0%	-19%	12%	

Information Technology	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	14%	2%	
1974	34%	14%	7%	
1980	8%	13%	11%	
1982	11%	16%	5%	
1990	-30%	27%	N/A	
1991	N/A	-42%	1%	
2001	32%	-59%	16%	
2008	15%	0%	N/A	
2009	N/A	3%	46%	
2020	-1%	12%	28%	
Average	12%	-4%	8%	

Materials	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	6%	-13%	
1974	48%	42%	-29%	
1980	41%	-4%	-10%	
1982	-10%	-97%	1213%	
1990	4%	-28%	N/A	
1991	N/A	-41%	-15%	
2001	9%	-48%	6%	
2008	-4%	-9%	N/A	
2009	N/A	-44%	74%	
2020	-4%	-5%	82%	
Average	13%	-25%	192%	

Energy	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	6%	-1%	
1974	60%	40%	-21%	
1980	68%	19%	7%	
1982	7%	-20%	-4%	
1990	3%	11%	N/A	
1991	N/A	-17%	-26%	
2001	117%	-9%	-45%	
2008	6%	17%	N/A	
2009	N/A	-58%	54%	
2020	-29%	-110%	1722%	
Average	38%	5%	-13%	

Industrials	Earnings y/y Growth			Sector EPS % of S&P
	Before	During	After	
	1970	-5%	-20%	
1974	22%	5%	-14%	
1980	20%	2%	6%	
1982	6%	-41%	29%	
1990	-12%	-6%	N/A	
1991	N/A	-13%	2%	
2001	6%	-12%	11%	
2008	11%	-4%	N/A	
2009	N/A	-32%	28%	
2020	-4%	-48%	68%	
Average	7%	-11%	10%	

S&P EPS falls less and later in recessions with inflation still elevated, such as 1974 and 1982.

Note: Average is on the recession years between 1970-2008

Source: S&P, Compustat, Clarifi, DWS Investment GmbH as of December 2023

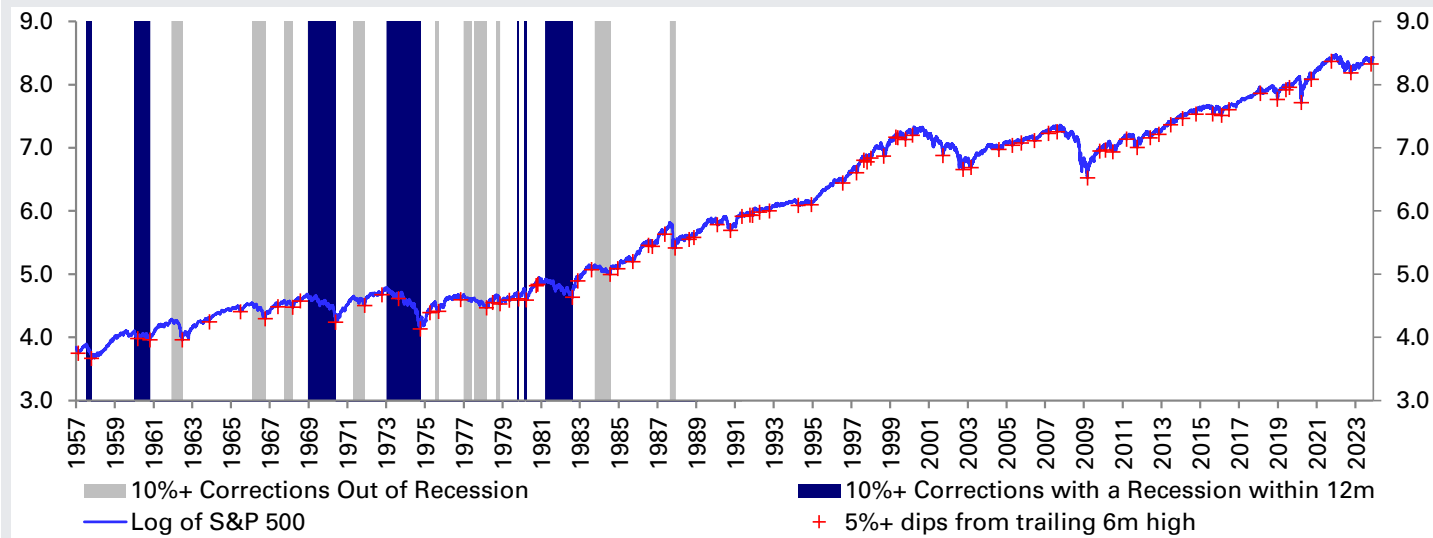
Historic S&P 500 5%+ pullbacks

From high of:	All time	3yr high	1yr high	6mos high
5% Dips	68	84	94	89
10% Corrections	29	34	35	34
15% Swoons	21	22	22	24
20% Bears	14	11	15	13
25%+ Crash	13	8	8	8

	Count	Avg Sell-off	Avg 3m Return	Avg 6m Return	Avg 12m Return
<b>5%+ Sell-offs</b>	89	-12.2%	11.4%	14.7%	20.5%
<b>5%+ Sell-offs Leading to a 10%+ Correction</b>	32	-20.9%	15.6%	21.0%	28.1%
<b>5%+ Sell-offs not Leading to a 10%+ Correction</b>	57	-7.4%	9.0%	11.1%	16.0%
<b>5% sell-offs without recession in 12m</b>	68	-10.5%	10.9%	14.4%	21.2%
<b>5% sell-offs leading to 10%+ &amp; no recession in 12m</b>	21	-18.0%	15.0%	20.1%	26.5%
<b>5% sell-offs not leading to 10%+ &amp; no recession in 12m</b>	47	-7.2%	9.0%	11.8%	18.7%
<b>10%+ Corrections with a Recession within 12m</b>	11	-26.4%	16.6%	22.9%	31.0%
<b>10%+ Corrections out of Recession</b>	21	-18.0%	15.0%	20.1%	26.5%
<b>10%+ Corrections out of Recession (ex 1987 Crash)</b>	20	-17.2%	14.8%	20.1%	26.8%
<b>10% Corrections Leading to a 20%+ Bear Market</b>	10	-33.9%	19.2%	24.3%	34.4%
<b>10% Corrections not Leading to a 20%+ Bear Market</b>	21	-14.1%	12.7%	18.2%	22.8%

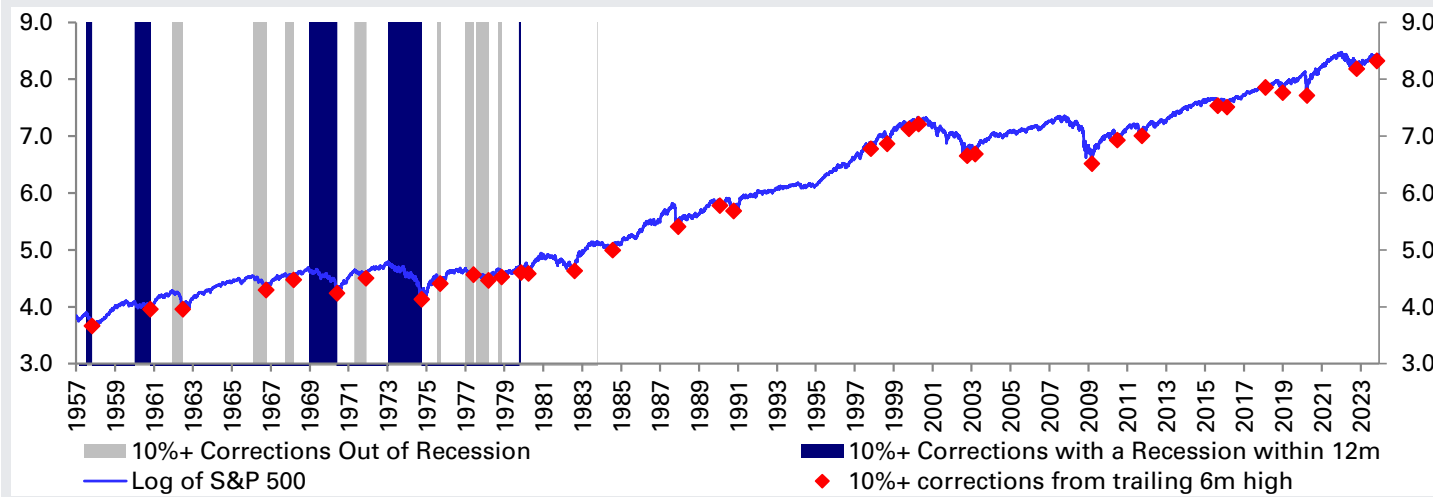
Source: Haver, Haver, DWS Investment GmbH as of December 2023. Past performance may not be indicative of future results.

### S&P 500 5%+ dips



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

### S&P 500 10%+ corrections



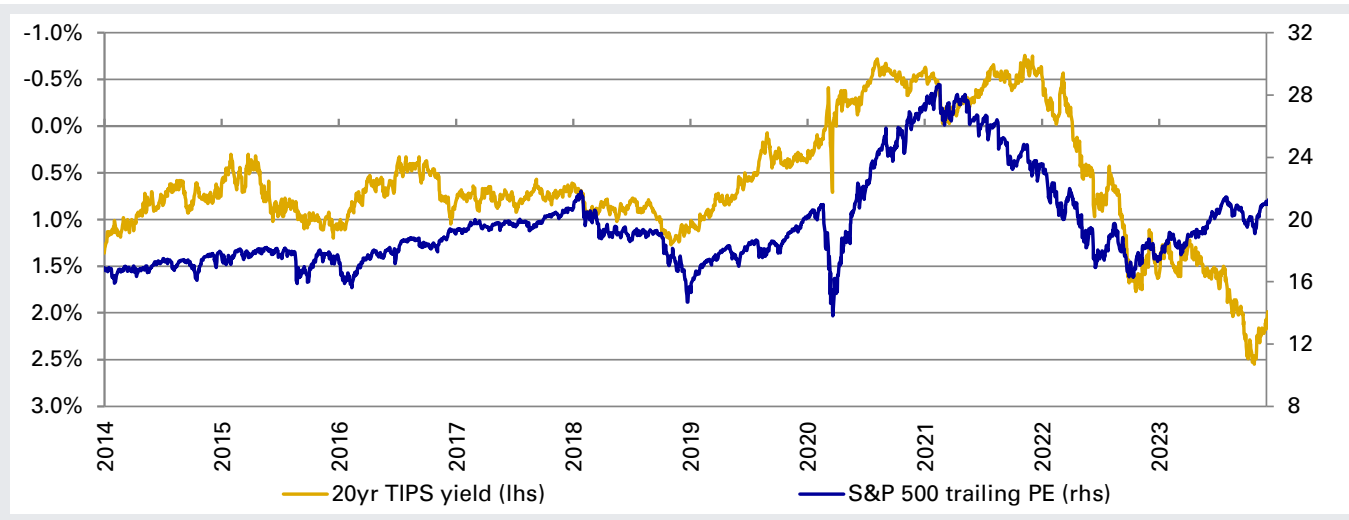
Source: Haver, Haver, DWS Investment GmbH as of December 2023. Past performance may not be indicative of future results.

## Historic S&P 500 sector PE

	S&P 500											S&P 500	S&P 500											S&P 500	
	Financials	Energy	Materials	Industrials	Tech	Cons. Disc.	Staples	Health Care	Utilities	Services	Real Estate		Communic ation	Financials	Energy	Materials	Industrials	Tech	Cons. Disc.	Staples	Health Care	Utilities	Services		Real Estate
1960	13.1	12.2	19.8	14.9	56.7	23.7	19.9	25.3	19.5	N/A	N/A	17.8	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
1961	19.9	14.0	25.2	18.0	70.5	33.8	24.6	30.9	23.5	N/A	N/A	22.4	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
1962	17.2	14.0	20.0	14.7	40.9	24.5	18.7	23.0	20.0	N/A	N/A	17.2	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
1963	18.3	14.5	20.0	15.4	39.5	28.0	19.6	24.6	20.8	N/A	N/A	18.7	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
1964	16.6	17.1	18.6	13.8	33.4	30.7	21.4	25.7	21.1	N/A	N/A	18.6	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
1965	14.2	15.5	18.7	14.5	38.9	27.7	20.5	28.1	19.5	N/A	N/A	17.8	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
1966	12.3	12.5	14.0	8.4	38.0	19.6	18.8	24.1	16.6	N/A	N/A	14.5	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
1967	11.3	13.2	19.3	12.9	53.3	26.5	23.5	29.0	15.1	13.3	N/A	18.1	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
1968	14.4	14.4	18.5	15.4	41.1	25.7	23.3	28.7	15.2	14.1	N/A	18.0	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
1969	12.0	10.7	14.7	11.5	43.6	24.6	23.8	31.4	12.3	12.2	N/A	15.9	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
1970	11.2	12.4	15.4	12.3	37.2	37.1	23.6	28.8	13.4	12.2	N/A	18.0	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
1971	11.5	11.5	19.2	16.2	40.9	30.5	25.3	32.0	12.5	11.2	N/A	17.9	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
1972	13.7	13.9	17.1	16.6	39.8	31.1	29.0	35.8	12.0	12.2	N/A	18.4	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
1973	11.0	8.8	11.0	14.9	23.4	19.4	19.1	29.1	8.9	10.1	N/A	12.0	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
1974	7.9	4.6	6.0	8.6	13.7	20.1	13.7	20.5	6.4	8.5	N/A	7.7	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
1975	8.9	7.4	11.4	12.5	23.9	23.1	60.1	19.2	8.0	9.9	N/A	11.3	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
1976	9.8	8.4	11.6	12.5	19.2	17.4	13.2	16.7	9.0	10.5	N/A	10.9	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
1977	6.6	7.4	12.3	9.1	13.1	12.0	11.1	13.4	8.4	8.7	N/A	8.7	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
1978	5.5	7.3	9.2	6.6	11.9	9.5	10.3	12.4	7.2	7.8	N/A	7.8	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
1979	5.5	5.7	7.0	7.3	11.7	10.3	8.6	12.2	7.2	6.5	N/A	7.3	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
1980	6.2	7.6	7.5	11.6	12.6	14.5	8.1	12.9	7.2	5.8	N/A	9.2	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
1981	6.5	5.9	10.2	9.2	12.9	15.9	9.0	13.0	6.5	6.9	N/A	8.0	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
1982	7.5	6.5	10.9	14.6	19.7	22.3	10.6	13.0	7.2	7.4	N/A	11.1	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
1983	8.6	7.6	15.2	51.2	28.4	13.8	10.4	12.2	7.1	10.3	N/A	11.8	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
1984	13.9	7.5	8.7	10.7	12.4	12.1	10.9	12.3	7.5	15.6	N/A	10.1	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
1985	15.5	9.9	39.1	15.5	16.2	16.1	14.2	17.6	9.8	15.4	N/A	14.5	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
1986	10.3	19.4	15.7	75.9	19.8	18.8	17.5	17.6	11.1	11.1	N/A	16.7	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
1987	NA	21.5	12.4	18.7	13.6	13.8	14.4	17.4	9.8	13.5	N/A	14.1	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
1988	8.0	11.5	5.9	11.9	12.5	16.4	13.9	15.2	11.2	10.8	N/A	11.7	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
1989	16.8	15.7	7.5	15.3	15.4	18.4	17.6	20.1	15.0	17.9	N/A	15.5	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
1990	10.7	14.0	8.2	18.7	13.3	14.7	16.3	18.9	14.9	13.6	N/A	15.2	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
													11/30/2023	14.9	10.6	18.7	20.3	30.7	27.3	19.9	19.7	17.0	19.4	16.7	21.1
													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: I/B/E/S, Compustat, DWS Investment GmbH as of December 2022

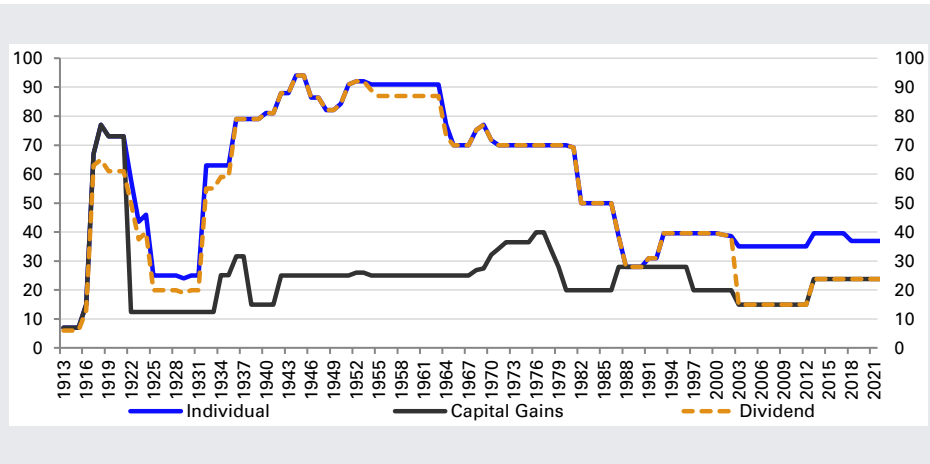
### U.S. real 20 year TIPS\* yield vs. S&P 500 PE ratio



\*Treasury inflation-protected securities

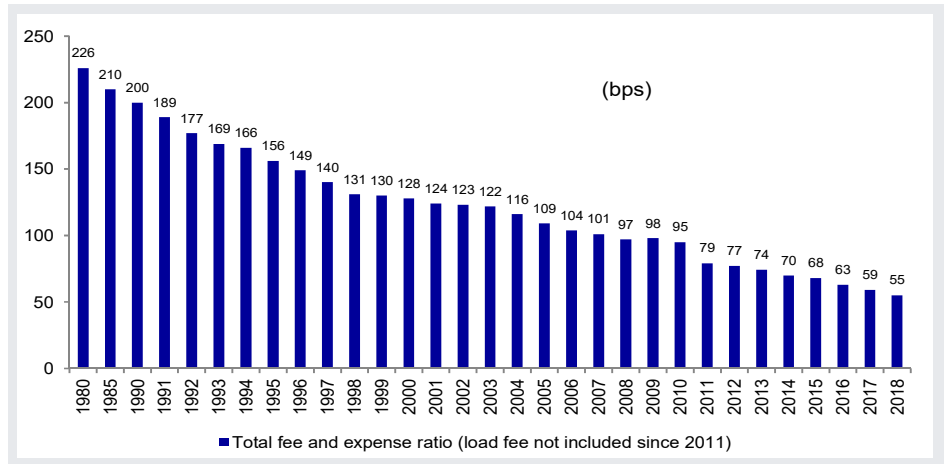
Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 12/8/2023

### Top marginal income tax rate, capital gain and dividend tax rate

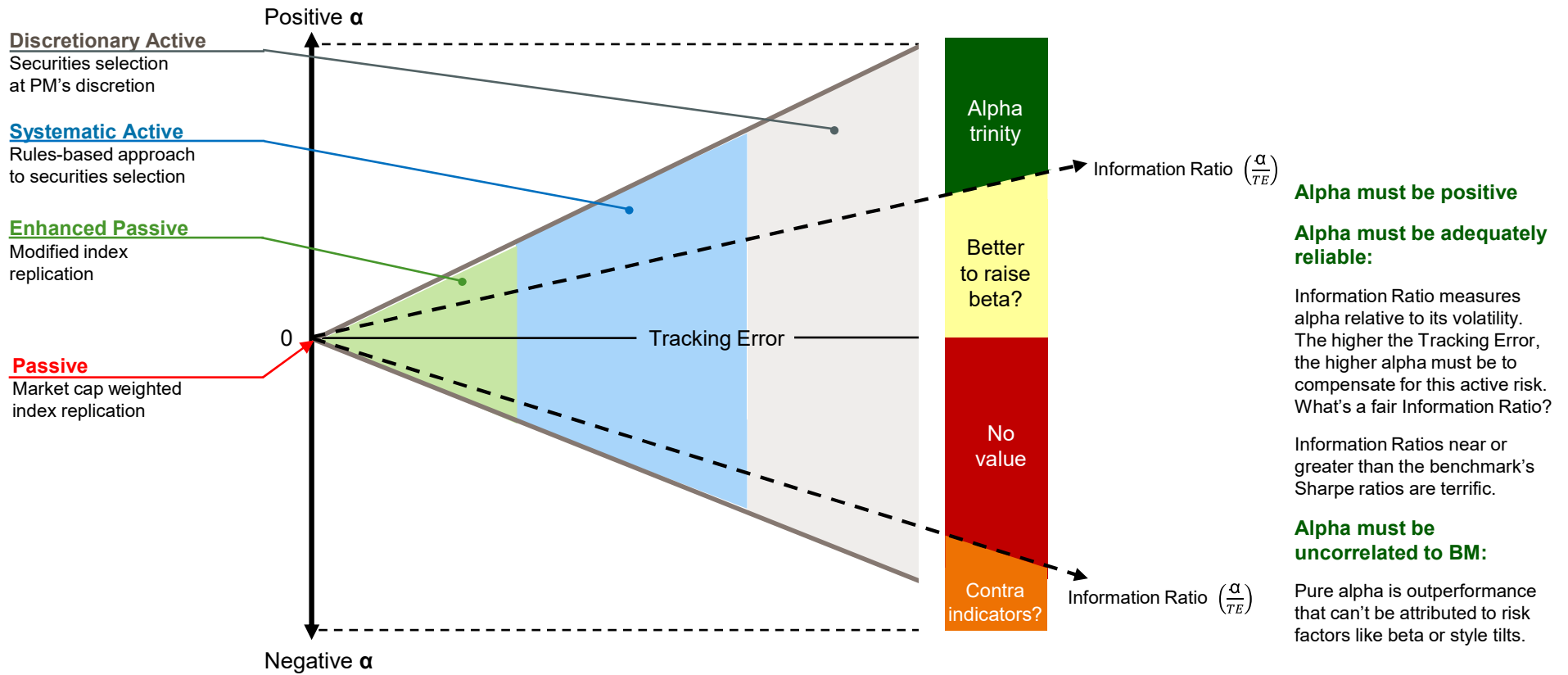


Source: ICI, IRS, Tax Policy Center, DWS investment GmbH as of December 2023

### Average fee & expense ratios of equity mutual funds (bps)



# Alpha Trinity



Source: DWS Investment GmbH

## 20 Investment Strategy Principles

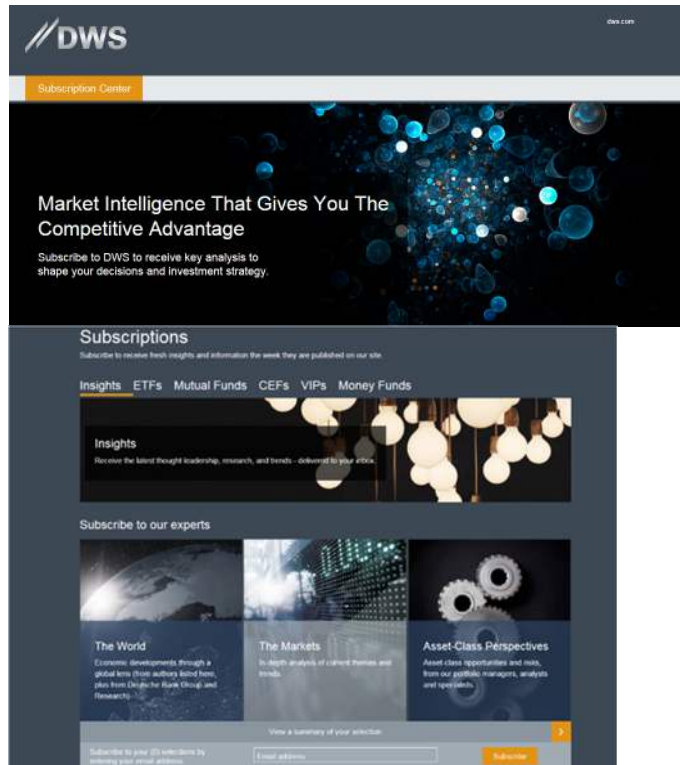
1. The value of a stock is the present value of all its future free cash flows. Do not rely on any valuation methodology that does not reconcile with this concept.
2. S&P is not U.S. GDP. Long-term S&P EPS growth  $\neq$  U.S. GDP growth. The S&P 500 differs regionally and by sector; it's global, digital 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

## Contact Information

David Bianco 212 454-8527, [david.bianco@dws.com](mailto:david.bianco@dws.com)

Ju Wang 212 454-8572, [ju.wang@dws.com](mailto:ju.wang@dws.com)



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