SECOR Asset Management

Capital Markets Update

November 20, 2023

General Market Update

Market Update

- Equities rallied across the board as investors bet that the Fed is done with raising rates
- Yields moved lower
- Dollar weakened

Performance of selected benchmarks as of Nov. 20, 2023:

	ACWI LOCAL	MSCI Europe Local	S&P500	MSCI EM LOCAL	MSCI WORLD USD	MSCI ACWI GBP	MSCI ACWI EUR	US Small Cap	MSCI EM (USD)	US 10 Yr Futures	UK Gilt Index	EM Bonds	HY
MTD Nov 2023	7.0%	5.0%	7.8%	5.2%	7.8%	5.2%	4.7%	8.3%	6.7%	2.7%	4.0%	3.6%	3.0%
QTD	4.1%	1.5%	5.5%	1.4%	4.6%	2.6%	1.7%	0.9%	2.6%	1.4%	3.6%	2.1%	1.8%
YTD 2023	15.7%	9.8%	19.3%	5.5%	15.1%	11.3%	12.8%	3.5%	4.5%	-0.3%	-0.5%	3.2%	7.8%
12 Months	12.9%	8.4%	15.7%	6.0%	13.3%	8.7%	7.8%	-1.3%	6.3%	0.0%	-4.9%	6.0%	8.3%

	ConsDiscr	ConsStapl	Energy	Financials	Health Care	Industrials	InfoTech	Materials	RealEstate	Comm Services	Utilities
MTD Nov 2023	9.7%	2.2%	-0.7%	8.2%	2.9%	7.3%	12.0%	5.5%	8.6%	8.9%	4.4%
QTD	4.8%	1.0%	-6.6%	5.6%	-0.4%	4.2%	12.0%	2.2%	5.5%	7.0%	5.7%
YTD 2023	32.8%	-3.8%	-1.0%	3.8%	-4.4%	8.9%	50.8%	4.8%	-0.2%	50.2%	-9.5%
12 Months	22.1%	-3.4%	-4.5%	1.1%	-3.0%	8.1%	42.1%	2.5%	-2.0%	44.0%	-6.5%

Source: Bloomberg, SECOR. Data as of November 20, 2023

Source: Bloomberg, SECOR

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Macro and Fixed Income

Macro Developments

- US CPI came in softer than expected (core MoM came in at 0.23% vs 0.3% consensus; headline at 0.0% vs 0.1% consensus); reinforces the weaker ISM, NFP, and unemployment figures last week
  - Bond yields fell and an equity rally followed
  - USD is on the defensive, down 1.5% in a week. Marks the biggest weekly slump since mid-July and 2023 gains erased – speculation increasing that Federal Reserve is done hiking rates

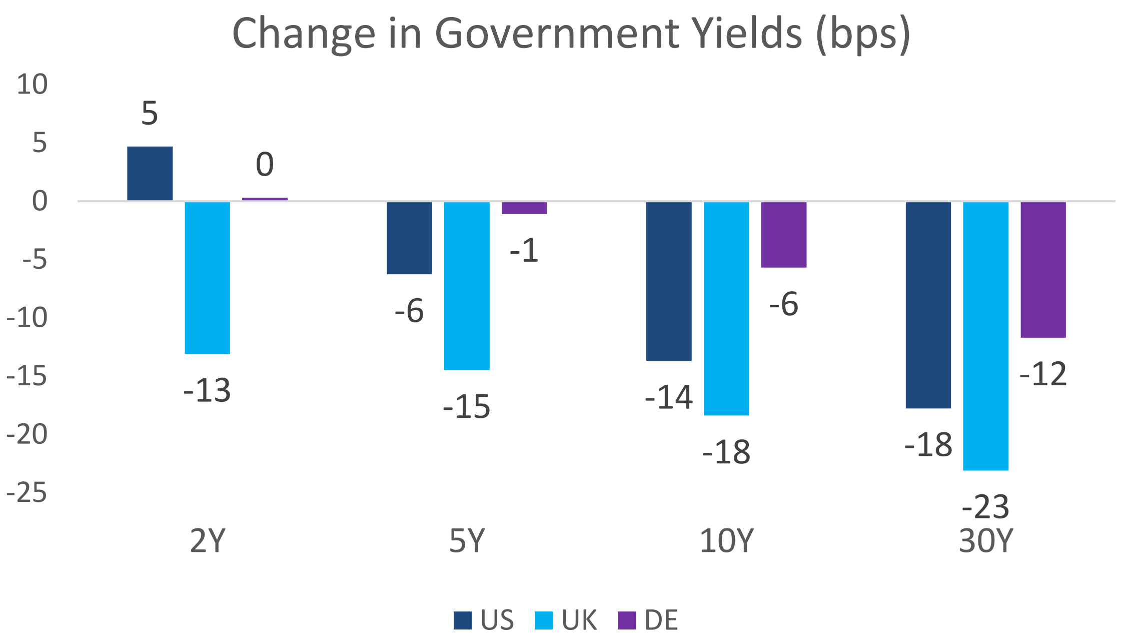
- UK retail sales fell unexpectedly in October (-0.3% MoM actual vs +0.4% expected), adding to the impression that the rate hikes are beginning to stymie economic activity. Markets pricing in a full point of ECB rate reductions next year and bets BOE cuts by June

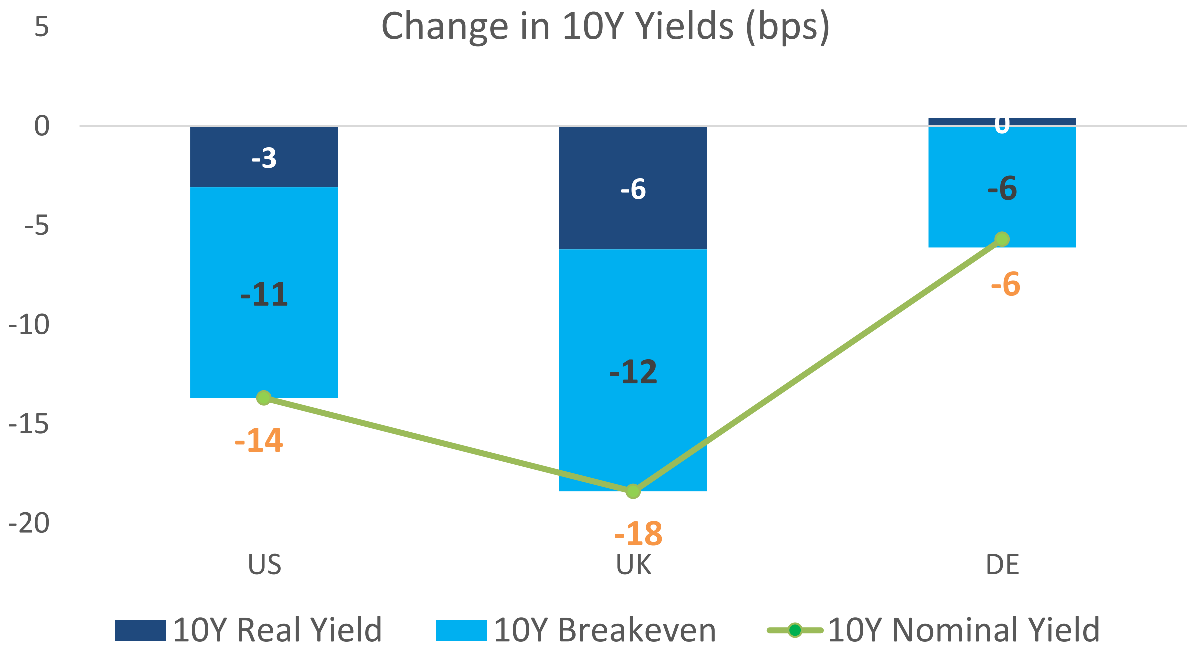
- Hedge Fund positioning in mega-cap tech is at record highs – share of single stock exposure in the 99th percentile since 2016 (started the year at 12%)

- Oil is in bear market territory, down 22% from the September highs – persistent supply growth from Russia, Iran, US, and Venezuela pushed oil lower amidst continued Middle East tensions and recessionary demand

Source: Bloomberg, SECOR

DM Rates

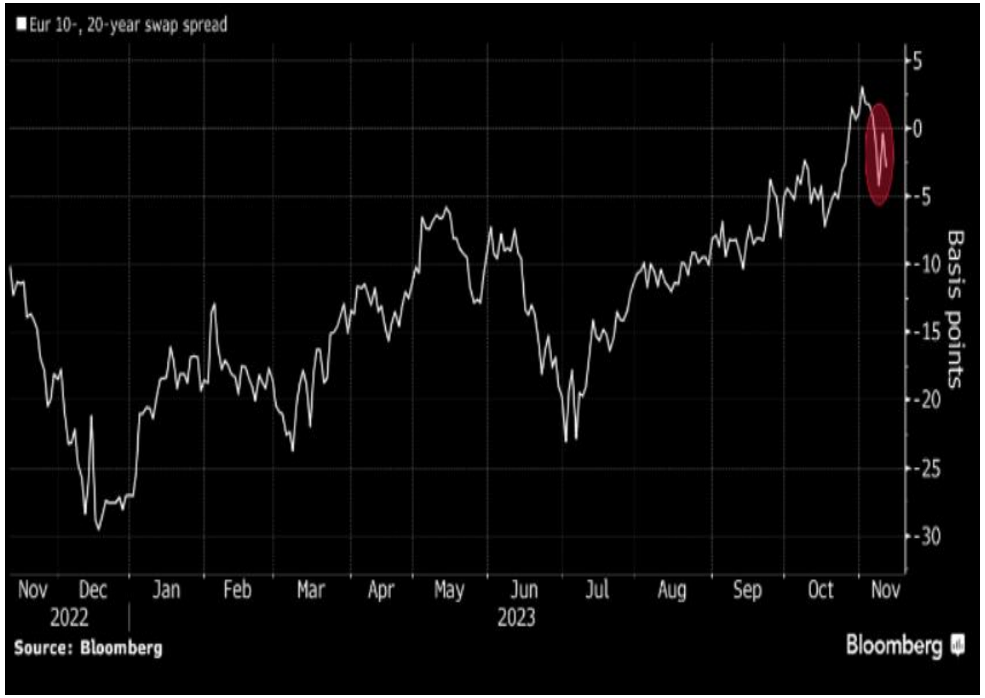


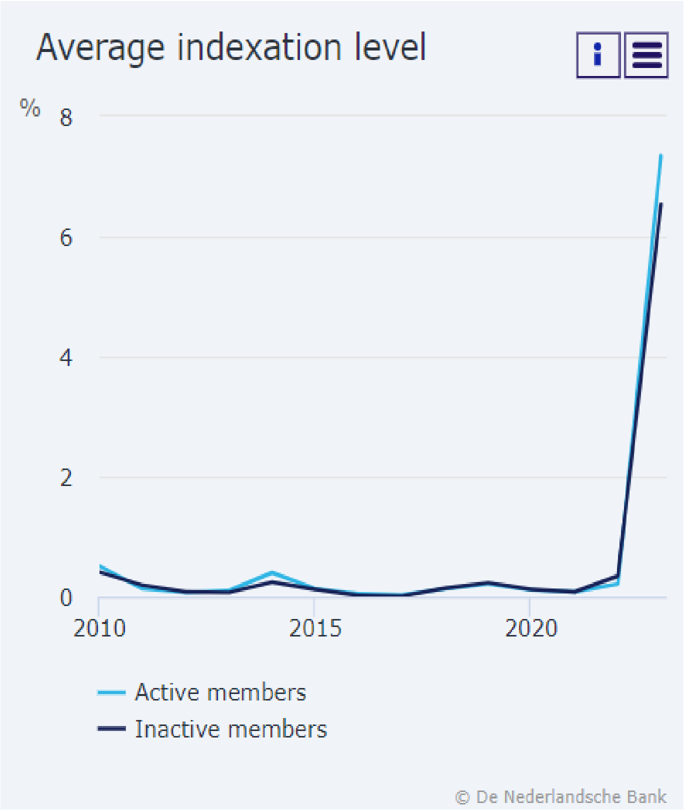


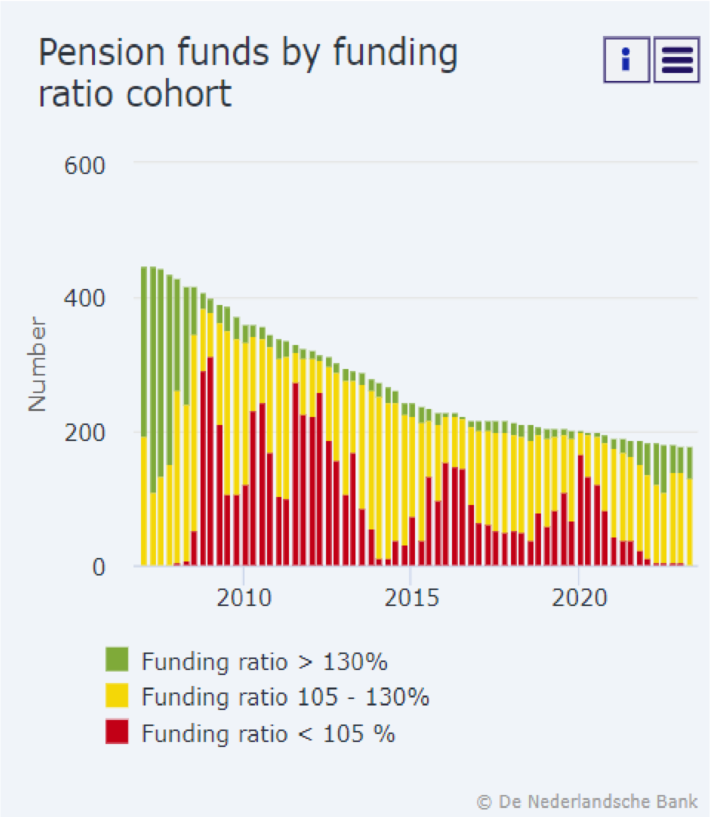
- Rates dropped and flattened over the past two weeks since 11/3
- US CPI and UK RPI continued its downward trend last week. We see breakevens moving down across the board to reflect the downside surprises

Source: Bloomberg, SECOR

Dutch Pension Fund Indexation Flows







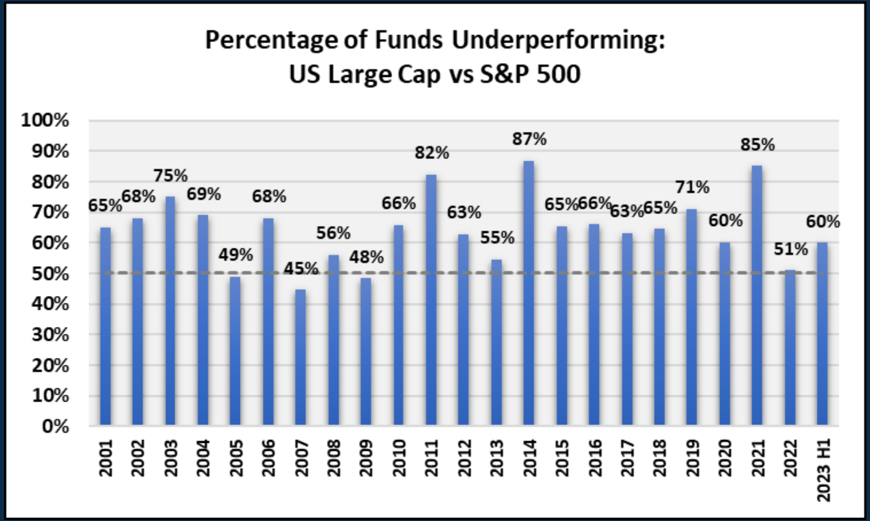
- EUR swap curve has steepened throughout the year but we saw some pullback last week
- There is a large flow from Dutch Pension Funds due to increase in indexation in 2023
- Pension funds are becoming better capitalized due to higher rates

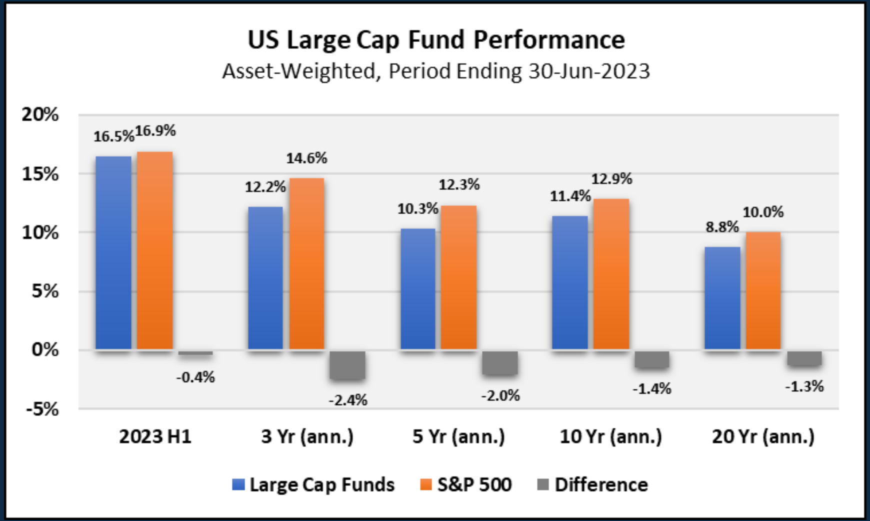
Source: Bloomberg, SECOR

Equity Update

Active Management Scorecard – First Half 2023

- **Active managers struggled in the US during the first half of 2023.**
  - 60% of large cap funds underperformed the S&P 500 in the first half, in-line with historical results (average 64%).
  - A majority of large cap funds have outperformed in only 3 of the last 23 years.
  - US Large cap funds underperformed the S&P 500 by 0.4% in the first half of 2023 with longer-term underperformance in the (1%) – (2%) range.

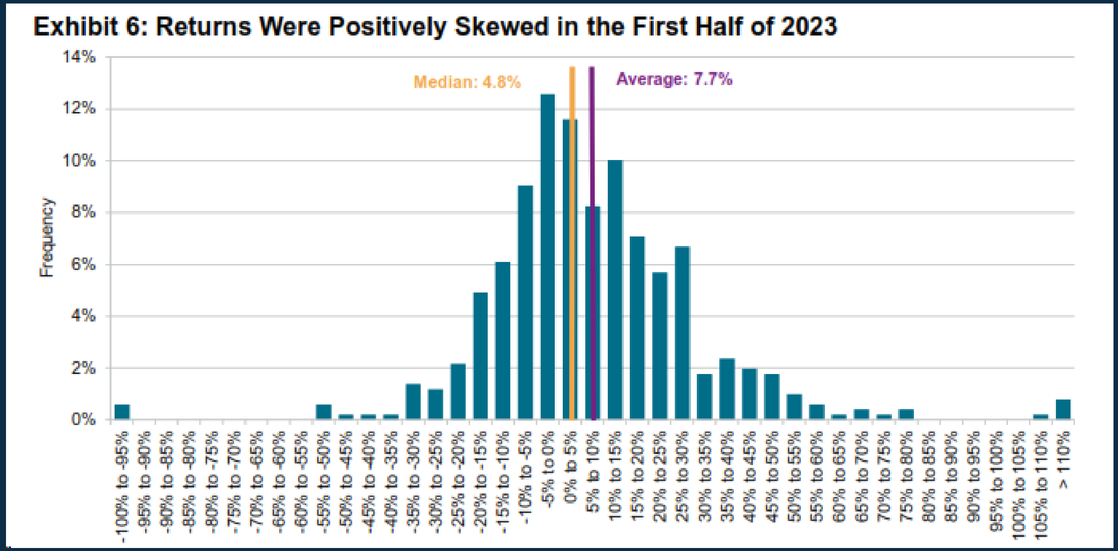




Sources: S&P Dow Jones Indices SPIVA US Scorecard Mid-Year 2023, SECOR.

Active Management Scorecard – First Half 2023

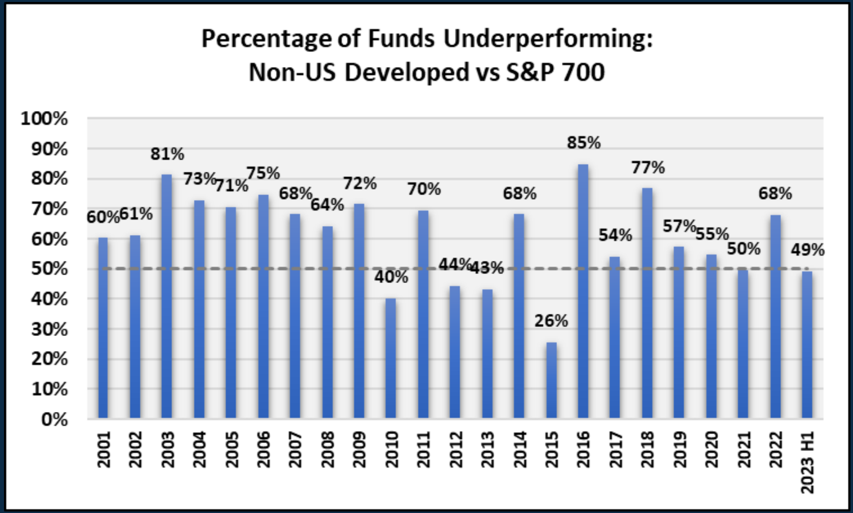
- **Active managers were challenged by the top-heavy market in the first half which saw just 28% of S&P 500 index constituents beat the index.**
  - Median stock return was 4.8% versus an average of 7.7%.
  - Active large cap managers have long been reluctant to overweight the largest stocks in the index.

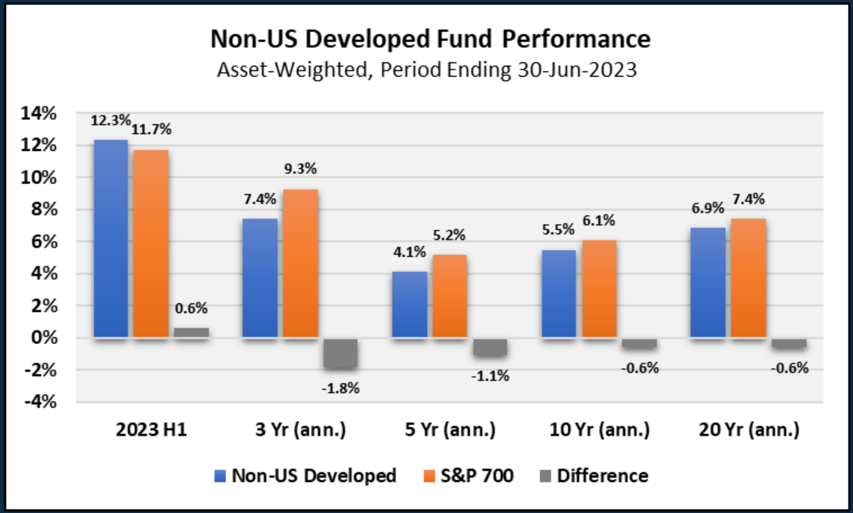


Sources: S&P Dow Jones Indices SPIVA US Scorecard Mid-Year 2023, SECOR.

Active Management Scorecard – First Half 2023

- **Non-US Developed funds fared slightly better in the first half of 2023 with 49% of managers underperforming (versus historical average of 61%).**
  - Active Non-US Developed managers outperformed by 0.6% in the first half, but longer-term relative performance is negative, albeit slightly less than that of US large cap managers.
  - A majority of Non-US Developed funds topped the index in 4 of the prior 22 years, similar to the US large cap experience.

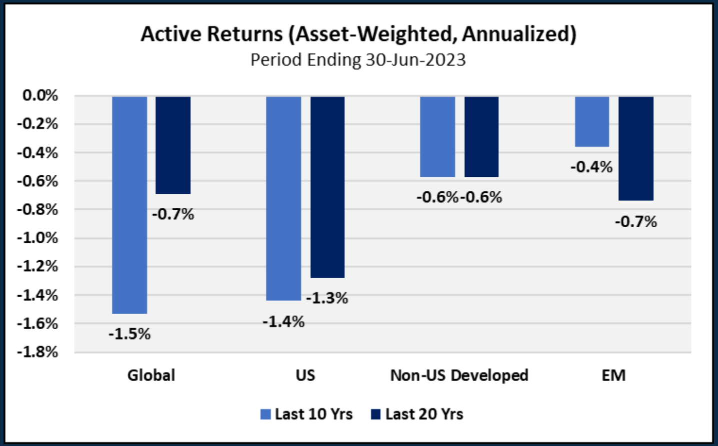


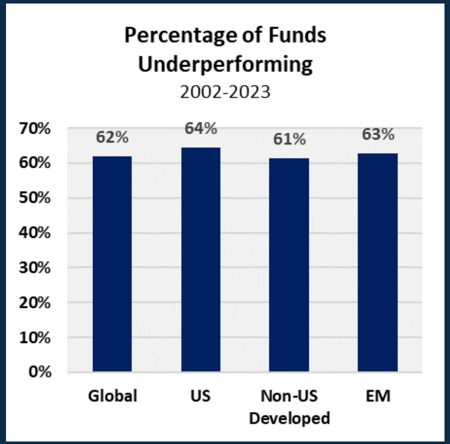


Sources: S&P Dow Jones Indices SPIVA US Scorecard Mid-Year 2023, SECOR.

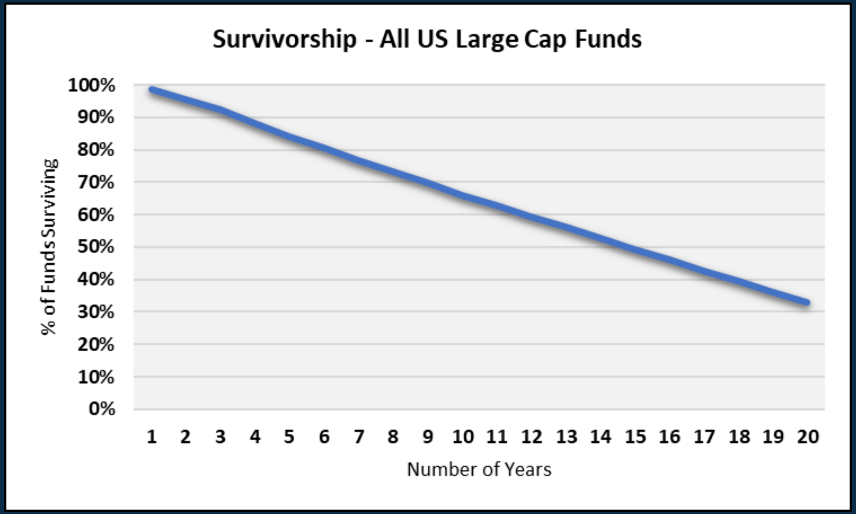
Active Management Scorecard – First Half 2023

- **Longer term, non-US funds have underperformed their index by less than US & US-dominated Global funds, but all share a similar percentage of underperformers.**





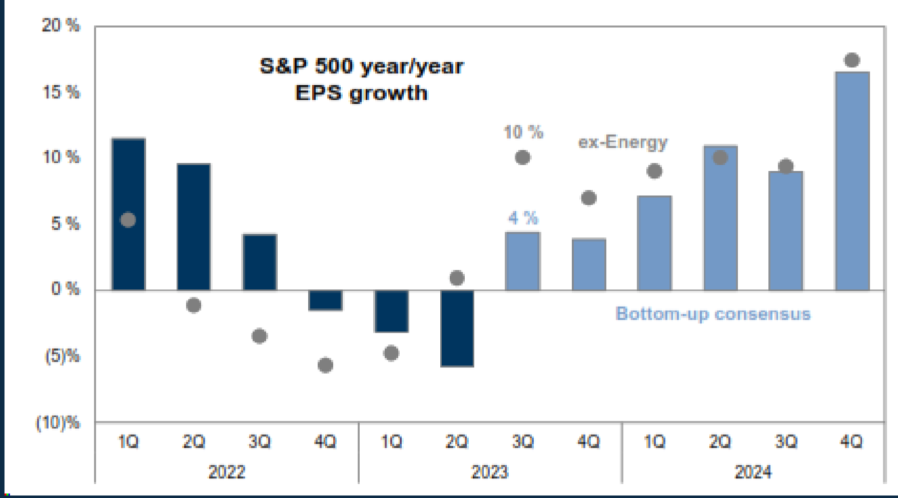
- **Two-thirds of US large cap funds have disappeared over the last 20 years; one-third have disappeared over the last ten years.**

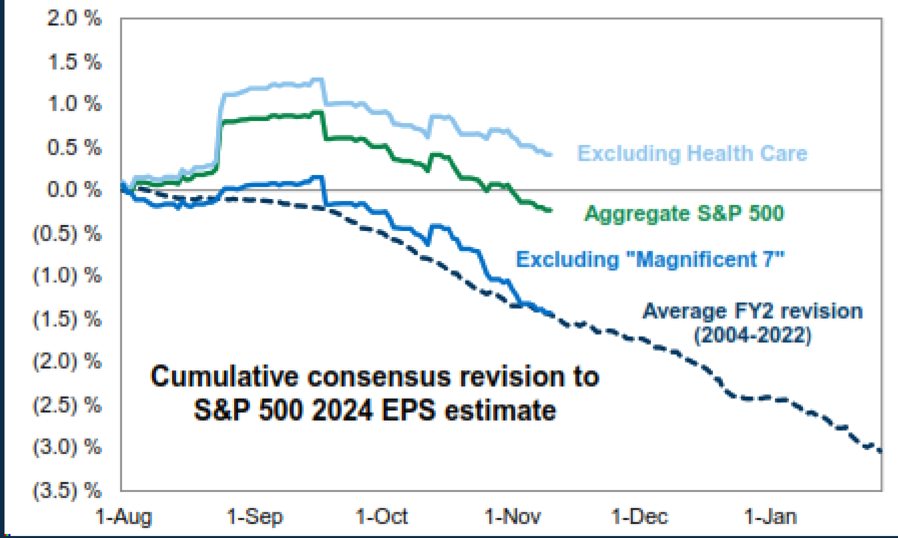


Sources: S&P Dow Jones Indices SPIVA US Scorecard Mid-Year 2023, SECOR.

Third Quarter Earnings Update - US

- **With 89% of the S&P 500 reporting, Q3 earnings have grown 4% YoY, ahead of the 0% expectation at the beginning of earnings season.**
  - Q3 marks the first quarter of YoY growth since Q3 2022.
  - Earnings improvement has been driven by expanding margins (except for the Energy sector); earnings surprises outpaced revenue surprises.
  - Q4 and 2024 consensus EPS estimates have been adjusted down during Q3 reporting season, but adjustments have been in-line with historical pattern.
    - Q4 est. 4% YoY growth
    - 2024 est. 11% YoY growth

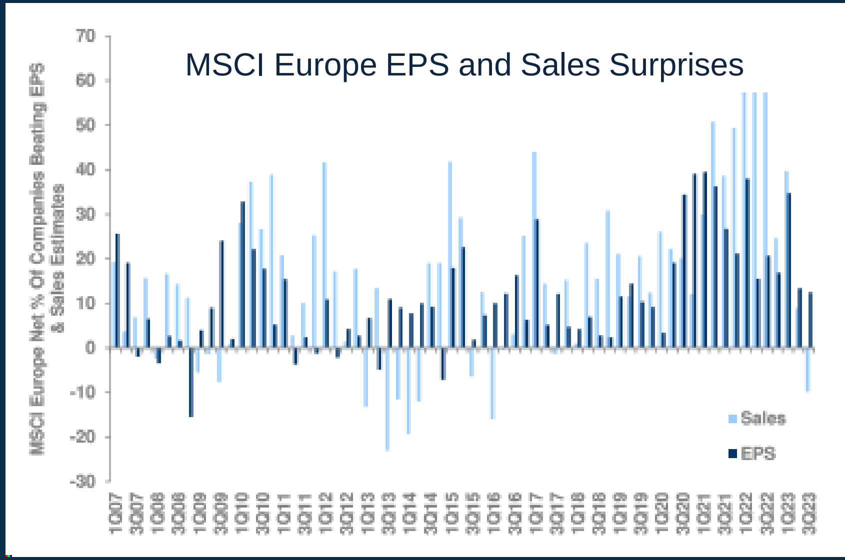


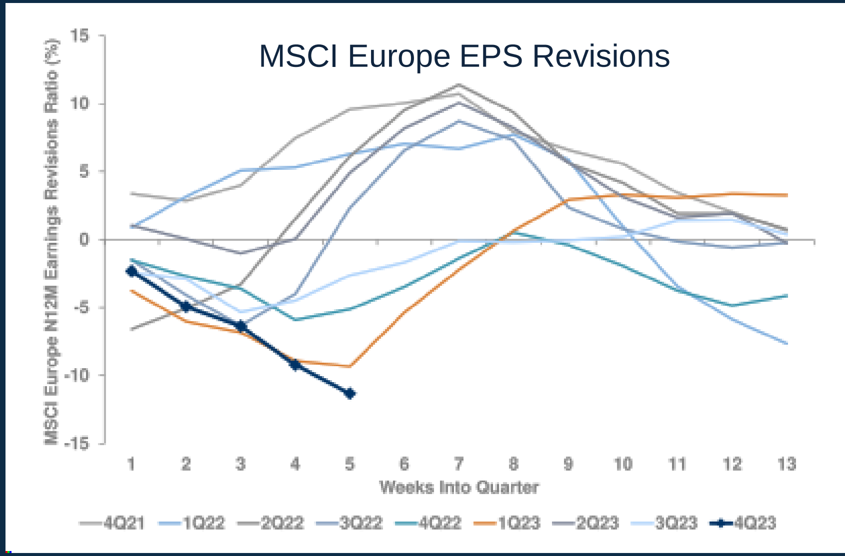


Sources: Goldman Sachs Global Investment Research, FactSet, SECOR.

Third Quarter Earnings Update - Europe

- **With ~80% of companies reporting, MSCI Europe Q3 YoY EPS growth stands at -9.8%, pulled down by the difficult comparisons of Energy companies.**
  - A net of 12% of companies reported positive earnings surprises (5% or better than consensus estimate); however, a net -10% reported revenue surprises, first miss on sales breadth in six years.
  - Next twelve-month earnings have been revised down at a much higher rate than recent history.
  - 2024 consensus EPS growth has been revised down to 7%.

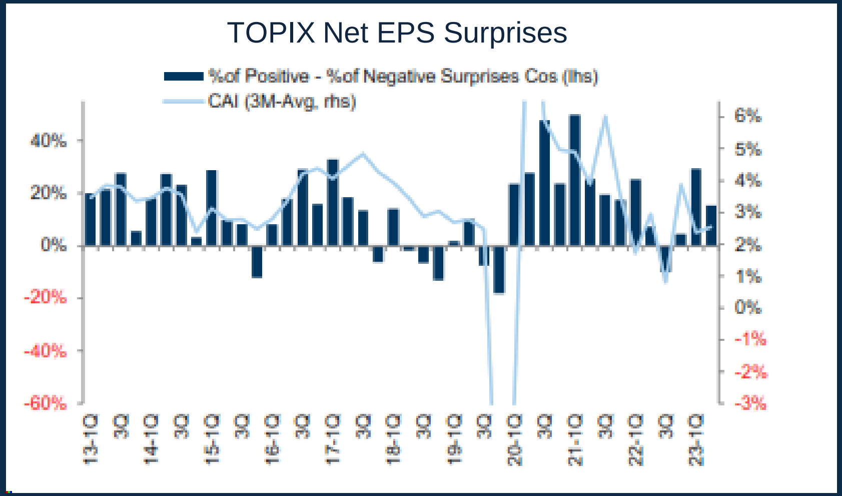


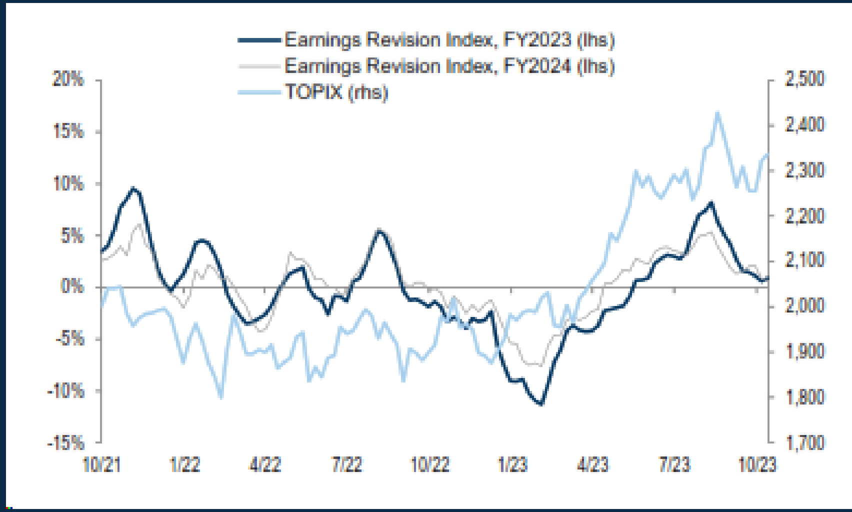


Sources: MSCI, Bloomberg, Morgan Stanley Research, Goldman Sachs Global Investment Research, SECOR.

Second Quarter Earnings Update - Japan

- **With ~80% of TOPIX constituents with Feb/Mar fiscal year ends reporting, Q2 earnings in Japan have come in at +17% YoY, versus an expected +9% at the beginning of earnings season (excl. volatile Softbank results).**
  - Net positive surprise of +15%.
  - After peaking in summer 2023, earnings revisions in Japan have reversed to neutral territory.
  - FY23 (3/24) consensus EPS growth +12%; FY24 (3/25) +8%.





Sources: IBES, FactSet, Goldman Sachs Global Investment Research, SECOR.

Special Topic - Possible Effects of AI on Productivity, GDP growth and Employment

Generative AI: Recent Research Re Possible Macro Effects

- **Goldman Sachs Economists Clarified Baseline Forecast for Affect on Global GDP[1]**
  - Impact still material but after taking expected offsets into account, it is significantly less than implied by the possible ~1.5% productivity lift referenced in their March report

- **Views of Tech Business Leader & Nobel Laureate Economist[2]**
  - Generative AI has considerable upside potential for productivity and growth, but fully realizing this potential will require intense attention to policy

- **Final Thoughts / Key Takeaways**

1. "The Potentially Large Effects of Artificial Intelligence on Economic Growth", GS, 26 March 2023 and "Upgrading Our Longer-Run Global Growth Forecasts to Reflect the Impact of Generative AI", GS 29 October 2023.
2. "The Coming AI Economic Revolution", Foreign Affairs, James Manyika (Senior VP, Google-Alphabet) and Michael Spence (Hoover Institute @ Stanford U.), November – December 2023.

GS Clarification of Estimated Impact of AI on GDP Growth

- **Potentially Large Effect of AI on Global Growth Cited in March Report**
  - Widespread adaption could lift global productivity ~1.5%
  - Eventually driving a 7% or almost $7tr increase in global GDP over 10 years

- **More Recent Report Notes *Net* Effect of Generative AI Likely to be Much Smaller**
  - Some AI-related gains may substitute for growth that would have occurred …
    - Otherwise in non-AI baseline / ICT[1] investment already lifting productivity
  - AI boost expected to be partially offset by ongoing productivity slowdown
    - Productivity growth lift from labor saving contributions likely to be transitory…
    - Rather than long lasting / Premature to forecast regime shift[2]

- **Macro Effects Incorporated into GS's Updated 10-year GDP Outlook**
  - Effect expected to be < 0.1%pt in every country pre-2027 and then…
  - Start to have a meaningful macro effect as adoption becomes more widespread
  - Expected net addition to GDP growth by 2034:
    - 0.4%pt in US, 0.3%pt in other DMs, 0.2%pt in major EMs[3]

1. Information and communication technology (ICT) advances and investment have driven ~40% of labor productivity growth since 2000
2. Given the limitations of current AI models including the tendency to "hallucinate" false information, generative AI is expected to drive efficiency gains by automating less difficult and time-consuming tasks to enable workers to focus on more productive activities
3. Re other EMs, due to longer delays in adoption and lower exposure, GS economists expected AI productivity boost to offset slowdown

GS Clarification of Estimated Macro Impact of Generative AI – cont'd

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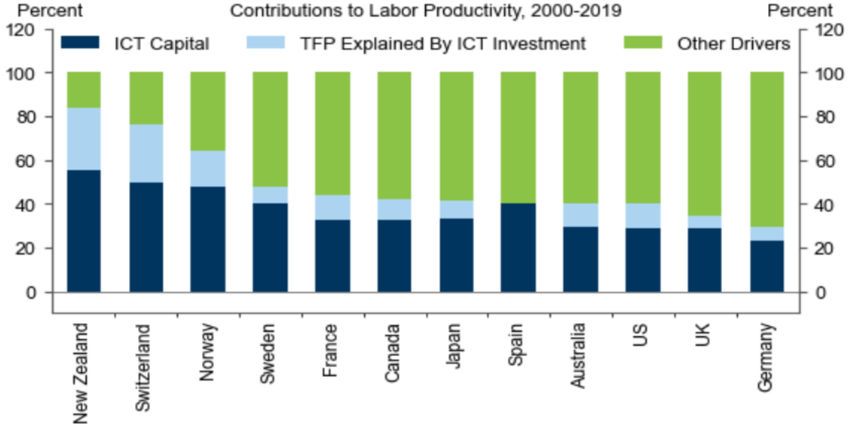
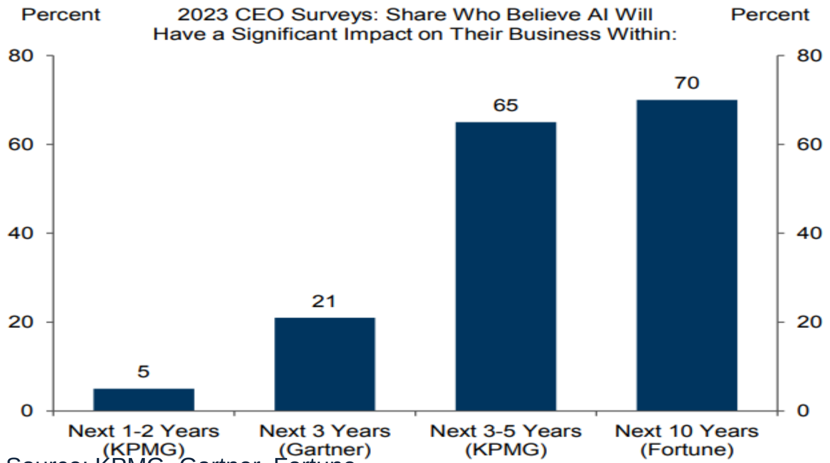
ICT's Contribution to Productivity



Source: OECD, GS

Forecast Adoption

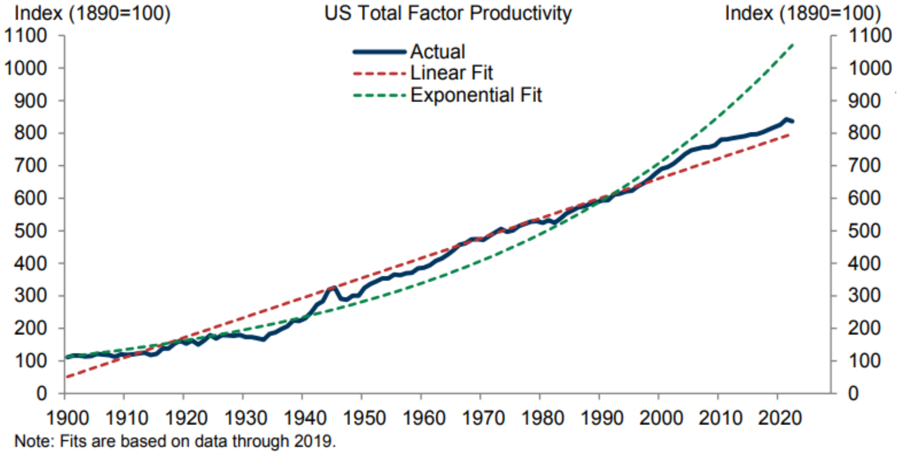


Source: KPMG, Gartner, Fortune, GS

- ICT advances & investment driver of ~40% of productivity growth since 2000
- Actual TFP trend since 1890 best explained by linear trend (red line)

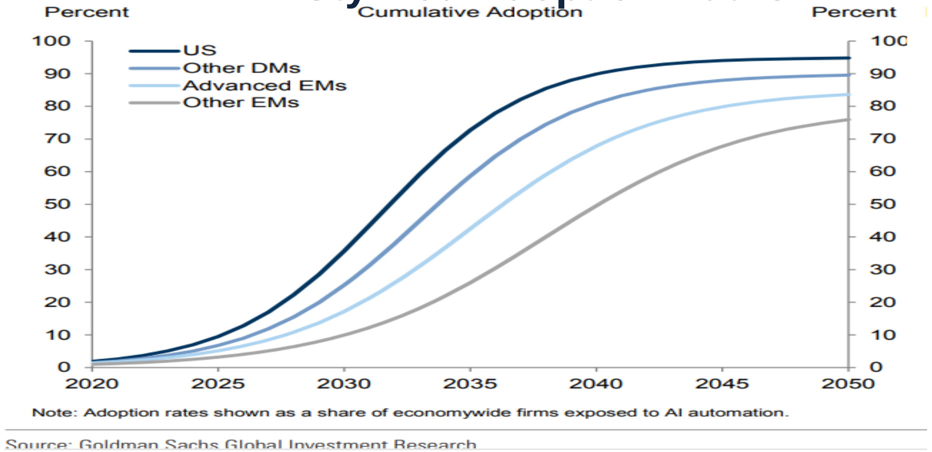
- Broad-based AI adoption expected
- US and other DMs expected to be leaders in adoption[1]

Total Factor Productivity (TFP)



Source: Bergead et al, GS

Stylized Adoption Paths



Source: GS

1. GS expected 50% generative AI adoption to be reached by: US(2031-32), other DMs (2033), advanced EMs (2035) and other EMs (2038)

AI Economic Revolution: Views of Tech Business Exec & Nobel Laureate Economist

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- **Generative AI Potential to Be Leading Driver of Economic Growth by Early 2030s**
  - Much of recent debate focused on dangers / potential equally or even more important

- **Advent of Generative AI Coming At Critical Time in Economic History**
  - Need to counteract forces slowing growth: demographics, de-risking, green transition[1]
  - AI has shattered the constraints of earlier digital technologies
  - LLMs[2] underlying GAI potential to be truly general-purpose technology
  - Multimodality[3] provides platform for almost any specific use

- **Authors' Observations, Caveats , and Key Recommendations**
  - Can't write humans out of script for foreseeable future
    - LLMs not 100% reliable/numerous examples of false information/hallucinating
  - Generative AI will cause far more jobs to change than to disappear[4]
  - Key recommendations include need to foster policies that:
    - Augment rather replace existing labor/focus on AIs most productive uses
    - Encourage widespread implementation across sectors and globally

1. Transition to clean energy expected to require $3 trillion of capital each year
2. Large language models (LLMs) are the transformed that makes it possible for model to learn in a self-supervised way
3. Multimodality: ability to operate in many modes — e.g., software code, audio, images, video and other kinds of input
4. Productivity increases translate into growth increases. Incorrect to assure that demand in fixed, or inelastic, and insensitive to price and cost changes

Final Thoughts / Key Takeaways

- **Generative AI Will Unquestionably Be a Material Macro Factor Over the Decade Ahead**
  - Macro effects likely to emerge beyond cyclical horizon — e.g., next two or three years
  - Significant differences among industries and countries

- **Reports Highlighted in Preceding Charts Suggest:**
  - Generative AI (GAI) will give a meaningful incremental lift to GDP growth in decade ahead…
  - Premature to assume the onset of exponential growth
  - GAI is likely to result in net increase in jobs, despite inevitable displacements
  - Sound policies important for realizing full potential

Public Equity Managers

Bull markets begin as earnings are contracting

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Peak →	Trough	Duration (M)	% Decline	P/E at Bear Trough	Bear Market % P/E Decline	+12M Return	+12M P/E % Change	+12M % EPS Change
06/03/1937	28/04/1942	62	-60%	8.0	-44%	54%	32%	3%
29/05/1946	13/06/1949	37	-30%	5.9	-74%	42%	25%	0%
02/08/1956	22/10/1957	15	-22%	12.2	-15%	31%	46%	-17%
12/12/1961	26/06/1962	6	-28%	15.8	-29%	33%	15%	11%
09/02/1966	07/10/1966	8	-22%	13.9	-20%	33%	31%	-4%
29/11/1968	26/05/1970	18	-36%	13.9	-26%	44%	35%	-7%
11/01/1973	03/10/1974	21	-48%	7.0	-62%	38%	55%	-15%
28/11/1980	12/08/1982	20	-27%	7.9	-17%	58%	55%	-11%
25/08/1987	04/12/1987	3	-34%	13.2	-37%	21%	-12%	43%
16/07/1990	11/10/1990	3	-20%	14.1	-14%	29%	31%	-9%
24/03/2000	09/10/2002	31	-49%	21.8	-27%	34%	-2%	25%
09/10/2007	09/03/2009	17	-57%	13.1	-19%	69%	33%	-36%
19/02/2020	23/03/2020	1	-34%	16.9	-13%	75%	96%	-22%
03/01/2022	13/10/2022	9	-23%	17.3	-32%	24%*	--	--
Average		18	-35%	12.9	-31%	43%	34%	-3%

Source: Fisher, Factset, Global Financial Data

Recessions do not always mean negative returns

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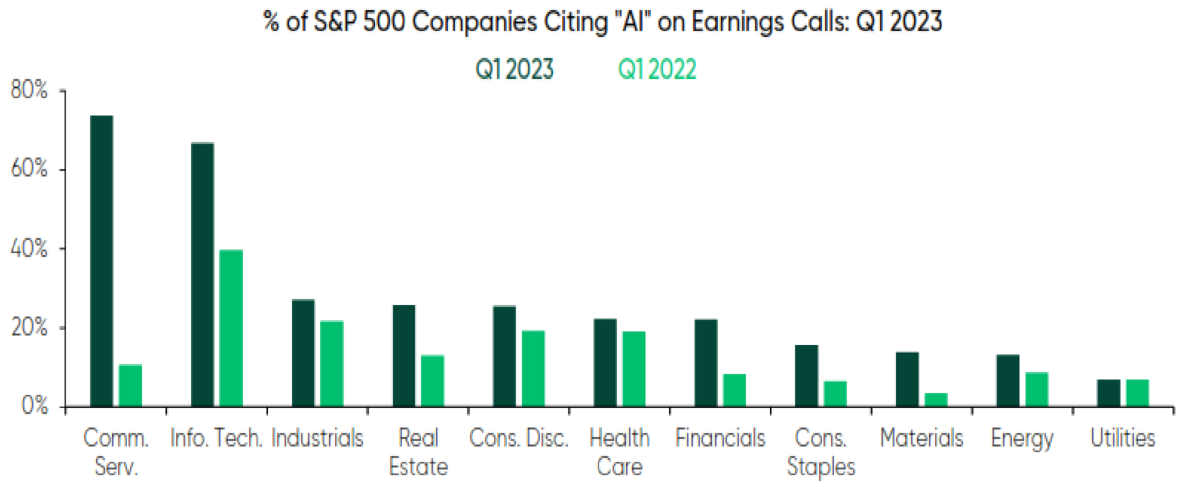
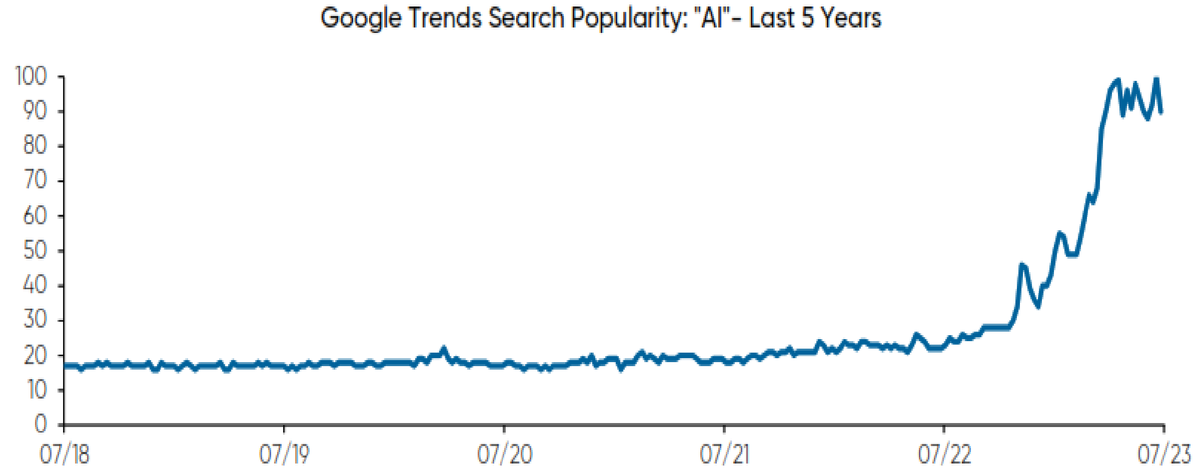
Recession				S&P Returns		
Start	End	Duration (Months)	Total Decline in US Real GDP	12 Months Before	During Recession	12 Months After
30/11/1948	31/10/1949	11	-1.7%	4.1%	15.7%	30.5%
31/07/1953	31/05/1954	10	-2.5%	3.1%	23.6%	35.8%
31/08/1957	30/04/1958	8	-3.6%	-1.1%	-1.2%	37.2%
30/04/1960	28/02/1961	10	-1.3%	-2.5%	20.1%	13.5%
31/12/1969	30/11/1970	11	-1.1%	-8.5%	-1.9%	11.3%
30/11/1973	31/03/1975	16	-3.1%	-15.4%	-7.9%	28.3%
31/01/1980	31/07/1980	6	-2.2%	20.4%	9.4%	12.9%
31/07/1981	30/11/1982	16	-2.6%	12.9%	14.1%	25.5%
31/07/1990	31/03/1991	8	-1.4%	6.5%	8.0%	11.0%
31/03/2001	30/11/2001	8	-0.4%	-21.7%	-0.9%	-16.5%
31/12/2007	30/06/2009	18	-4.0%	5.5%	-35.0%	14.4%
29/02/2020	30/04/2020	2	-9.6%	8.2%	-1.1%	46.0%
Median		10.0	-2.4%	3.6%	3.5%	20.0%
Average		10.3	-2.8%	1.0%	3.6%	20.8%
Frequency Positive		-	-	58.3%	50.0%	91.7%

Source: Fisher, Factset, Global Financial Data

AI is not just a technology play





- Venture used to be technology and biotechs; Now also include fintech, healthtech, consumertech, digitalization, climate change etc.
- Technology is increasingly pervasive across business landscape

Source: Factset, GoogleTrends

Private Equity Managers

Some positive news

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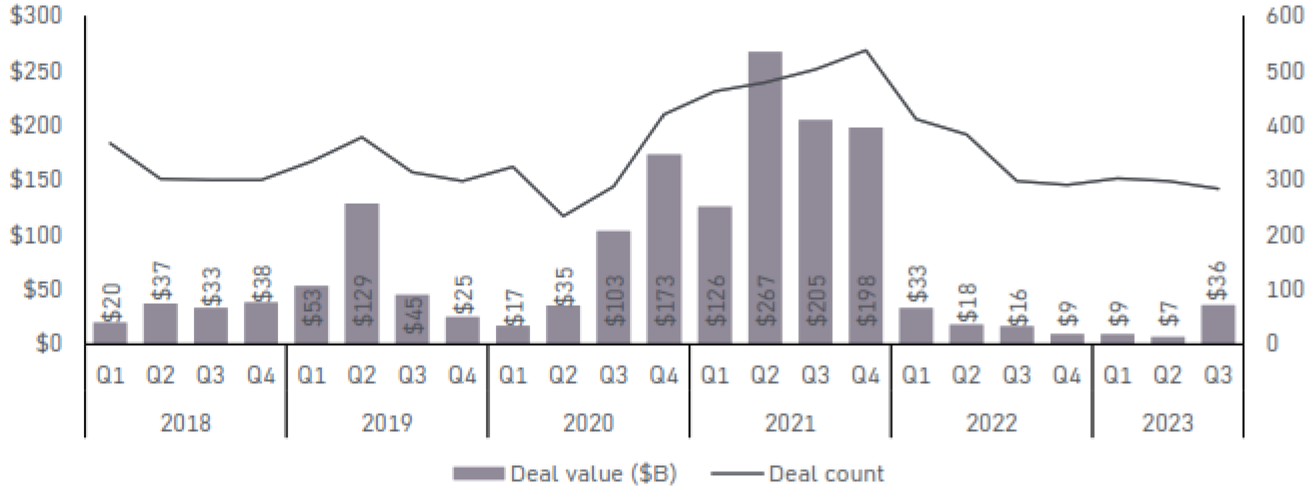
U.S. VENTURE CAPITAL EXIT ACTIVITY

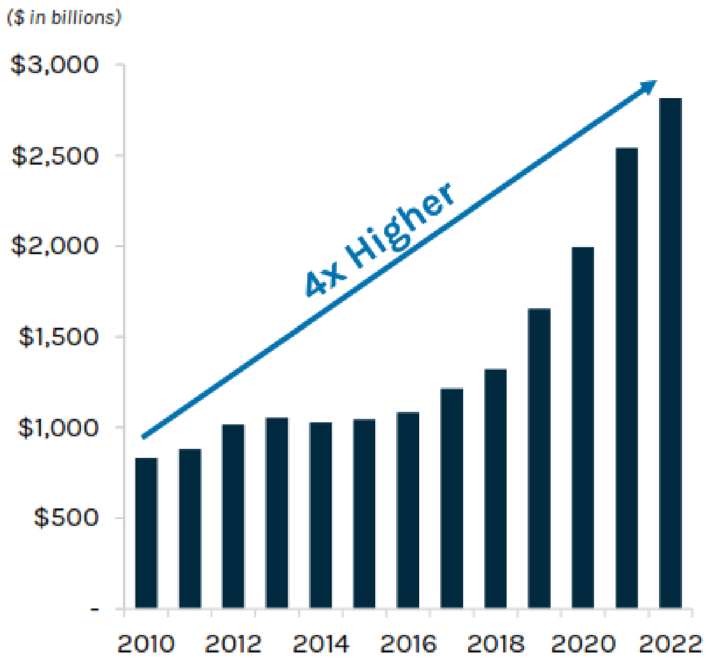


Data Source: Q3 2023 PitchBook-NVCA Venture Monitor. Q4 2022 – Q3 2023 includes estimated deal count of 8, 23, 42, and 68 respectively.

- Q3 2023 saw $36 billion in exit value, which is more than double the prior two quarters combined.
- IPO uptick – Klaviyo, Instacart
- IPO backlog of 75companies at the end of Q3.

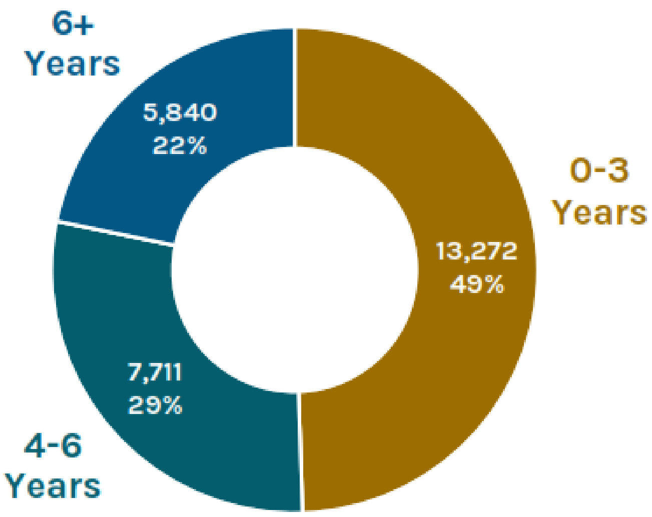
Pent up supply – buyouts sitting on a large amount of un-exited assets

Global Buyout Unrealized Value[1]
$ in billions



Buyout Funds Are Sitting on $2.8TN of Un-Exited Assets Relative to $1.1TN of Dry Powder (~39%)

Aging of Buyout Backed Companies[2]
Number of Companies



~51% of Companies Owned by Buyout Funds Have Been Held for 4+ Years and 22% for 6+ Years

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- IPO uptick – Klaviyo, Instacart
- IPO backlog of 75companies at the end of Q3.

Source: Ares, Preqin

Hedge Funds

Qualitative HF Alpha Drivers (9-12m view)

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Factors	Comments	Historical Range
HF Supply v. Demand	• Multimanagers causing fee expansion, more $ than talent • Voloridge and Linden raising fees/hurdles • Great time to be a large hedge fund	Bearish Neutral Bullish
Liquidity	• US Banking failures did not spread • Reports about government bond markets lacking depth	Bearish Neutral Bullish
Corporate Activity	• Rates are high but deals are closing and money is flowing • US Government anti-trust activity in decline • Real Estate somewhat frozen	Bearish Neutral Bullish
Government Influence	• US Government anti-trust activity in decline • SEC regulating hedge funds • Louder deficit reduction chatter	Bearish Neutral Bullish

Current Quarter
Previous Quarter

Middle East Investing in Sports and Financial Markets

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Middle East Capital At Work				
		Sports	**Fund**	**Investments**
Who	Saudi Arabia	World Cup 2034, LIV Golf Tour	PIF - $650B	Local Infrastructure
	Qatar	World Cup 2022, PSG	QIA - $475B	PE - Affinity Partners
	UAE	Man City, NYCFC	ADIA - $850B	Multimanager HF's
	Other	Bahrain Formula 1 Race	Kuwait's KIA - $750B	India & China - renewables, EVs
Historical Precedents		Berlin Olympics 1936		Japanese purchase Rockefeller Center
		Japanese purchase Pebble Beach		Softbank buys WeWork
Goal		Upgrade reputation		Increase Investment Returns
		Gain respect and Influence abroad		Exert influence on fund manager and strategy

Middle East Investing in Sports and Financial Markets

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Middle East Capital At Work		
	Sports	**Investments**
Impact	Takes attention away from established leagues	Crowds Strategies
	Shifts power from mgmt to players	Shift power from LPs to GPs
	Financial pressure on rival leagues or teams	Pressures peers to invest more in technology and talent
	Forging new alliances (Saudi Arabia investing in Israel)	Multimanagers opening offices in Dubai
Winners	Owners - raises team value	Hedge funds - more AUM, higher fees
	Players - higher pay, more jobs	Traders - more places to work, higher compensation
	Fans - more choices, more excitement	Entrepeneurs - more risk capital in play
Losers	Other Leagues - outspent, losing attention/relevance	Other Hedge Funds - losing talent, more competition for alpha
	Other forms of entertainment - competition for eyeballs	Hedge Fund Investors - paying more, earning less alpha
Response	Merger - PGA Tour merged with Saudi's LIV Tour	Schonfeld Hedge Fund raises capital and downsizes

How can SECOR react/respond?

- Look for more evidence of SWF impact
  - Ask multimanagers for info about investor activity
  - Ask multimanagers about where they are deploying capital
  - Document knock-on effects of multimanager mania

- Pursue strategies beyond reach of multimanagers
  - Investments that are semi-illiquid or hard to lever up
    - Credit
    - Reinsurance
    - CTA’s – not capital intensive

- Keep risk at moderate levels

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