



Economy Becomes Even More Surprising

ECONOMY

Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation; instead, the economy grew 2.5% for the year. While the rate of overall growth slowed in 4Q, the economy seemed to get stronger by the quarter in 2023.

Increases in 2023 but Inflation Tops Worries

INSTITUTIONAL INVESTORS

Robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022. But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount, likely due to those same equity gains.

Dovish Policy Drives Widespread Gains

EQUITY

U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in. Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23 for global ex-U.S. markets as well.

Broad Market Quarterly Returns

U.S. Equity Russell 3000



Global ex-U.S. Equity MSCI ACWI ex USA



U.S. Fixed Income Bloomberg Agg



6.8%

Global ex-U.S. Fixed Income Bloomberg Global Agg ex US



9.2%

Sources: Bloomberg, FTSE Russell, MSCI

Broad Rally for Bonds Across the World

FIXED INCOME

Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89. The 10-year U.S. Treasury yield closed the year at 3.88%. Global bonds saw broadbased gains across countries and developed markets topped the U.S.

Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS

The NCREIF Property Index fell 3.0% during 4Q23. The NCREIF Open-End Diversified Core Equity (ODCE) Index fell 4.8% during 4Q. The FTSE EPRA Nareit Developed REIT Index rose 15.6% during 4Q23. The FTSE Nareit Equity REITs Index increased 16.2%.

Big Slowdown After Frenzy of 2021

PRIVATE EQUITY

Both new investment activity and exit activity slowed markedly in 2023. Public equity's strong recovery in 2023 has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT

Given its high returns, private credit remained in high demand across Callan's investor base. Private credit assets under management stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028.

Gains Spurred by Stocks and Bonds

HEDGE FUNDS/MACs

Most hedge fund managers showed gains in 4Q23. Equity hedge strategies were the best performing. Relative value strategies generated positive performance as well, while event-driven strategies also ended on a strong note. Multi-asset class (MAC) strategies also gained.

2.9% Drop After Three Quarters of Gains

DEFINED CONTRIBUTION

Despite the loss, the Callan DC Index™ saw a trailing one-year gain of 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) fell 3.6%. Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter, driven by investment losses.

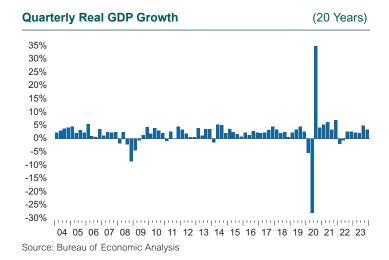
The Economy Is More Surprising by the Quarter

ECONOMY | Jay Kloepfer

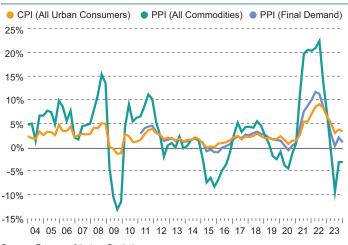
The U.S. economy grew by 3.3% in 4Q23, once again surprising to the upside. If you asked anyone who has to indulge in the hubris of forecasting the economy, all of 2023 has been a surprise. Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation by raising interest rates; instead, the economy grew 2.5% for the year, up from the 1.9% rate in 2022. The job market has generated 5.4 million new jobs since the end of 2019, before the start of the pandemic. Real wages and real income growth turned positive in mid-2023 as inflation subsided but demand for workers remained. Workers feel confident in the tight labor market, and this confidence is driving consumer spending. Consumption expenditures accounted for half of GDP growth in 3Q and almost 60% in 4Q. The economy seemed to get stronger by the quarter in 2023.

So why no recession? Underneath the mayhem that defined both 2022 and 2023—geopolitical uncertainty, spiking inflation, rising interest rates, and the volatility in the equity market—the U.S. and global economies remain in remarkably good shape. The U.S. economy weathered the rate hikes in 2022 and 2023 particularly well. The first reason is stimulus and lots of it, around the globe, which translated into pent-up demand. Second, the very tight labor market in the U.S. gives workers and their families confidence to spend. Third, despite the housing market taking a big hit as mortgage rates shot up, housing has not dragged down the economy as in rate hike episodes of yore. In addition, we do not have a mortgage crisis similar to the one that struck in 2008-09 and nearly took down the banking system.

However, we do have a commercial real estate tsunami working through offices in central business districts and retail trade, which will reshape the physical as well as business landscape of many communities in the U.S. Finally, we do have a housing shortage around the U.S. that may have long-term generational consequences for homeownership, wealth creation, and financial security for younger people.



Inflation Year-Over-Year



Source: Bureau of Labor Statistics

Inflation shot up to 9% in mid 2022, but the rate of price increases began to ebb in the second half of 2022 and declined steadily to 3% by the end of 3Q23. Unfortunately, headline inflation ticked back up to 3.5% by the end of the year, so we are not out of the inflation woods yet. Even as the rate of price increases comes down, prices are now "permanently" higher unless we see deflation. The level of the CPI-U index is up 10% since the start of 2022.

One key factor keeping inflation from falling back toward the Federal Reserve's goal of 2% is the labor market. We ended 2023 with labor markets not only tight but tightening. Initial unemployment claims (measured on a weekly basis)-one of our few leading indicators-began climbing in 2Q, and by early spring weekly claims had surpassed the average set in 2019 of 218,000. As claims rose to 250,000 by August, the data appeared to show that interest rate hikes were finally starting to bite. Then initial claims fell back sharply and we ended the year at 203,000. Continuing unemployment claims also began to rise from a very low level starting in 4Q22 and ended the year about 9% higher than the pre-pandemic level. So initial claims show workers holding onto jobs, but the continuing claims show workers have a bit more trouble finding jobs once laid off. However, the unemployment rate remains low at 3.7%. The tightness in the labor market is inconsistent with the Fed's goal of achieving its 2% inflation target. As continuing claims rose in 2023, bond markets read the data as the first sign of easing in the labor market, but the robust end-of-the-year GDP report, the lower initial claims, and the strong December job market report suggest labor market tightness is not yet easing.

The remarkable GDP growth is fueling continued demand for workers, and with inflation falling while wages are rising, workers saw real incomes (wages and salaries net of inflation) grow in each of the last three quarters of 2023, with a sharp gain of 2.5% in real disposable (after-tax) income in 4Q. Average hourly earnings growth slowed from 5% (annual growth) in 2022 to 4% by December 2023, but as inflation fell real wage growth finally turned positive starting in May, and this real growth carried through December (wage growth is exceeding inflation).

The upshot: it may take longer than many believed to unravel the current growth momentum in the U.S. economy. The Fed had stated

The Long-Term View

		Pe	riods E	Ended 1	2/31/23
Index	4Q23	1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	12.1	26.0	15.2	11.5	7.7
S&P 500	11.7	26.3	15.7	12.0	7.6
Russell 2000	14.0	16.9	10.0	7.2	7.9
Global ex-U.S. Equity					
MSCI EAFE	10.4	18.2	8.2	4.3	4.4
MSCI ACWI ex USA	9.8	15.6	7.1	3.8	
MSCI Emerging Markets	7.9	9.8	3.7	2.7	
MSCI ACWI ex USA Small Cap	10.1	15.7	7.9	4.9	7.3
Fixed Income					
Bloomberg Agg	6.8	5.5	1.1	1.8	3.9
90-Day T-Bill	1.4	5.0	1.9	1.3	1.9
Bloomberg Long G/C	13.2	7.1	1.1	3.2	5.2
Bloomberg GI Agg ex US	9.2	5.7	-1.6	-0.8	2.2
Real Estate					
NCREIF Property	-3.0	-7.9	4.3	6.8	8.0
FTSE Nareit Equity	16.2	13.7	7.4	7.6	9.3
Alternatives					
HFRI Fund Weighted	4.2	8.1	7.1	4.6	6.3
Cambridge PE*	-0.4	4.2	14.6	14.3	13.9
Bloomberg Commodity	-4.6	-7.9	7.2	-1.1	2.8
Gold Spot Price	11.0	13.4	10.1	5.6	8.2
Inflation – CPI-U	-0.3	3.4	4.1	2.8	2.5

*Data for most recent period lags. Data as of 3Q23.

Sources: Bloomberg, Bureau of Economic Analysis, FTSE Russell, Hedge Fund Research, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

earlier in 2023 a belief that rates would remain elevated, based on its economic expectation of "stronger for longer." After the Fed reversed course in the November and December FOMC meetings, signaling rate cuts were likely in 2024, the economy reverted to stronger for longer on its own.

Recent Quarterly Economic Indicators

	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22
	70,20	JQ25	2020	10,20	7922	JQZZ
Employment Cost: Total Compensation Growth	4.2%	4.3%	4.5%	4.8%	5.1%	5.0%
Nonfarm Business: Productivity Growth	3.2%	4.9%	3.6%	-0.8%	1.6%	0.4%
GDP Growth	3.3%	4.9%	2.1%	2.2%	2.6%	2.7%
Manufacturing Capacity Utilization	77.1%	77.7%	78.0%	78.2%	78.5%	79.4%
Consumer Sentiment Index (1966=100)	64.9	69.6	62.3	64.6	58.8	56.1

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan

Gains in 2023 but Inflation Tops Worries

INSTITUTIONAL INVESTORS

- The 2023 equity market was up 24%, led by seven securities nicknamed "The Magnificent Seven."
- Other 493 securities gained 12% in 2023.
- These robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022.
- Nonprofits showed the best returns, while corporate defined benefit (DB) plans and Taft-Hartley plans brought up the rear.
- But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount.
- Remarkable U.S. equity gains likely played a big role in that gap.
- As has been the case for years, institutional investors continued to show 20-year returns close to but still below the 60%/40% benchmark.

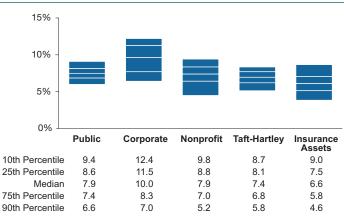
All Investor Types

- The major macroeconomic issues investors are discussing include:
 - Interest rates: As has been true for much of the past year, worries about inflation and the future direction of interest rates were pervasive.

- Recession: There is no shortage of worries that could cause one: interest rate hikes, global armed conflicts, U.S.-China conflict, the U.S. presidential election
- Equity valuations: The Magnificent Seven and index concentration worried some clients, while stock prices in light of higher interest rates were also a concern.

Quarterly Returns, Callan Database Groups

(12/31/23)



Source: Callan

Callan Database Median and Index Returns* for Periods Ended 12/31/23

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	7.9	13.0	4.3	9.0	6.9	7.2
Corporate Database	10.0	11.8	-0.1	6.6	5.7	6.6
Nonprofit Database	7.9	13.5	4.3	8.7	6.5	7.0
Taft-Hartley Database	7.4	11.9	4.5	8.6	6.9	6.8
Insurance Assets Database	6.6	9.7	1.5	5.1	4.1	4.9
All Institutional Investors	8.1	12.6	3.7	8.3	6.5	6.9
Large (>\$1 billion)	7.5	11.7	4.6	8.6	6.9	7.2
Medium (\$100mm - \$1bn)	8.2	12.8	3.8	8.4	6.5	7.0
Small (<\$100 million)	8.3	13.1	3.4	8.2	6.2	6.5
60% S&P 500/40% Bloomberg Agg	9.7	17.7	4.7	10.1	8.1	7.4

^{*}Returns less than one year are not annualized.

Source: Callan. Callan's database includes the following groups: public defined benefit (DB) plans, corporate DB plans, nonprofits, insurance assets, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

Public DB Plans

- The average or median discount rate, according to the most recent NASRA survey, remains at 7.00%.
- A 7.00% return expectation can be hit with almost 50% in fixed income.
- Plans have increased their exposure to both fixed income and/or alternatives.
- Given this rate, investors are weighing how or whether to adjust allocations based on Callan's 2024-2033 Capital Markets Assumptions.
- The rise in fixed income expectations in particular has made estimated return-on-asset assumptions much easier to hit.
- But if plans increase their discount rates, the higher funded status could lead to increased pressure to improve benefits.

Corporate DB Plans

- Liabilities decreased as rates rose.
- Interest rate hedging continues to work.
- Plans that were hedged were insulated from changes to interest rates in 2023.
- Some plans focused on total return "won" for a second year in a row as rising rates decreased the liability, resulting in an increased funded ratio.
- As closed plans' liabilities shorten, interest in intermediate fixed income continues.

- Many plans' improved funded status has led some to further implement de-risking glidepaths.
- Higher fixed income assumptions have led clients to weigh changing allocations to the asset class, but in different ways. Some are looking at long duration bonds, others at whether to add to their fixed income allocations or stay pat.

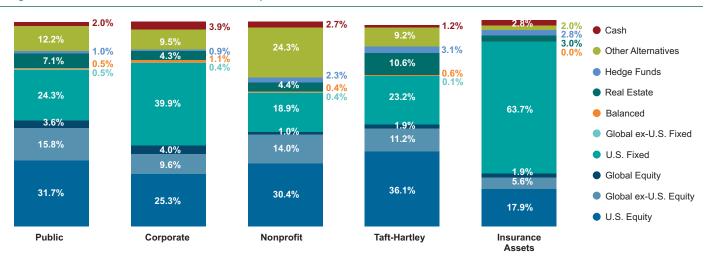
Nonprofits

- These investors are still focused on total return.
- Interest in private credit remains strong.
- Inflation concerns continue to affect real returns.
- Strong economies can lead to strong fundraising efforts. which can help dampen return volatility.

Defined Contribution (DC) Plans

- These are the significant new issues:
 - SECURE 2.0 and its postponement
 - Retirement income and how the maturing demographics of participants, higher rates, and rollovers can affect the different types of retirement income solutions plans can choose.
- The gap in returns between money market and stable value funds was a new source of concern for some plans.

Average Asset Allocation, Callan Database Groups



Note: Charts may not sum to 100% due to rounding. Other alternatives include but is not limited to: diversified multi-asset, private credit, private equity, and real assets. Source: Callan

Equity

U.S. Equities

End-of-the-year rally

- U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in.
- The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year.
- The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline.
- 2023 saw the narrowest breadth of leadership ("the Magnificent Seven") since 1987, with just 27% of stocks outperforming the S&P 500. Historically, such concentrated leadership has not been the sign of a healthy market.
- Fourth quarter and 2023 returns for the bunch were impressive: Alphabet: +6.8%, +58.8%; Amazon: +19.5%, +80.9%;

Apple: +12.6%, +49.0%; Meta: +17.9%, +194.1%; Microsoft: +19.3%, +58.2%; NVIDIA: +13.9%, +239.0%; Tesla: -0.7%, +101.7%.

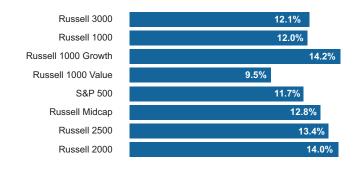
- The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023.
- However, gains started broadening out in the last two months of the year with the equal-weighted S&P index outperforming the capitalization-weighted version.
- Smaller cap stocks also outperformed their large cap counterparts in 4Q23, further proof of the broadening out of returns.
- For the full year, large cap stocks outperformed small cap stocks by almost 10 percentage points.
- Growth vs. value performance was mixed across market capitalization during the quarter. Within large cap, growth outperformed value, while the opposite was true within small cap.

U.S. Equity: Quarterly Returns

(12/31/23)

U.S. Equity: One-Year Returns

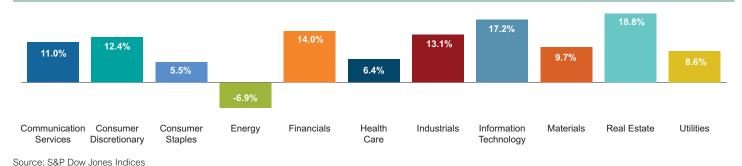
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Sources: FTSE Russell and S&P Dow Jones Indices

Quarterly Performance of Industry Sectors (12/31/23)



Global Equities: Global markets in the black for 4Q **Broad market**

- Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23.
- Global ex-U.S. small caps reclaimed some of their lagging performance in 4Q but ended the year as the worst-performing broad-based index, albeit up over 12%. Elevated borrowing costs and the persistent risk of a recession have kept investors away.
- Japan's low rates have benefited exporters, and the threat of being delisted spurred a stock buy-back spree. Coupled with an increased focus on governance, this spurred Japan to a multi-decade high.

Emerging markets

- Emerging markets underperformed developed markets.
- India's rally couldn't overcome China's weakness, whose economic growth was near the government's target, but investor concerns around stimulus and a surprisingly sluggish reopening drove stocks lower.

Growth vs. value

- Energy, a volatile area in the market, pulled back value's rally after having a strong 3Q. Global ex-U.S. growth rallied on lowering yields but couldn't overcome earlier underperformance and ended the year behind its value peers in both emerging and developed markets.

U.S. dollar vs. other currencies

The U.S. dollar weakened in 4Q as investors believed that U.S. interest rates would fall faster than much of the developed world.

China: Danger or opportunity?

Long-term growth potential

 China has the second-largest GDP and the world's largest population of consumers.

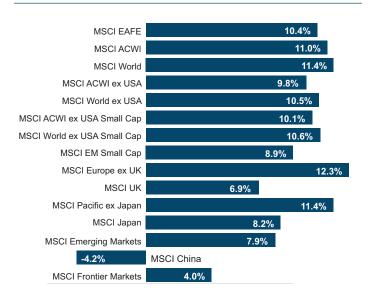
Valuation

Valuations remain attractive on a forward P/E basis.

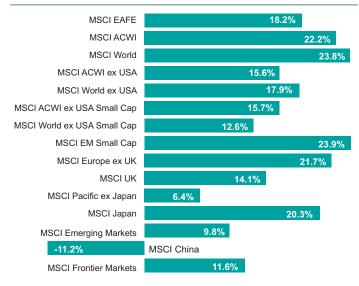
Structural challenges

- Inbound foreign direct investment (FDI) for China went negative for the first time as local markets remained weak and geopolitical tensions persisted.
- China is run by an authoritarian regime that may act against investors' best interests.

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 12/31/23)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 12/31/23)



Source: MSCI

Fixed Income

U.S. Fixed Income

Strong returns at end of year

- Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89 (when the 90-day T-bill was over 8% and inflation hit 14% earlier in the decade)!
- 10-year U.S. Treasury yield closed the year at 3.88%
- A round trip from December 2022, masking significant volatility during the year
- High was 4.98% in October and low was 3.30% in April
- Corporates and mortgages outperformed Treasuries for the quarter and year.
- High yield corporates soared as defaults remained low and the economy resilient.

U.S. Treasury yield curve remained inverted, but less so

106 bps as of 6/30; 44 bps as of 9/30; 35 bps as of 12/31

Fed kept Fed Funds rate on hold and softened language

- Pivoted from "higher for longer" to projected rate cuts in 2024
- Inflation over past six months below Fed's 2% target
- Core PCE Price Index was 1.9% annualized in November.
- Markets expect six rate cuts in 2024 versus three in the Fed's Summary of Economic Projections.

Valuations

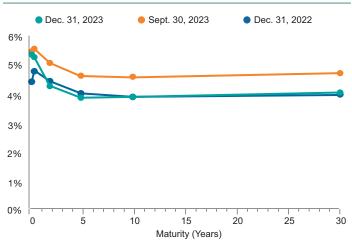
 Investment grade and high yield corporate spreads now below 10-year averages

Municipal Bonds

Gains in 4Q and a superb November

- November was the best month since August 1982.
- Helped by falling yields, muted issuance, and strong demand
- Reversed the -1.4% year-to-date return as of 9/30

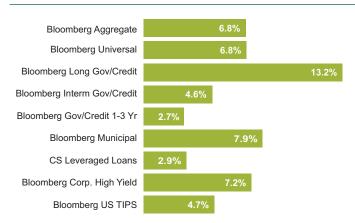
U.S. Treasury Yield Curves



Source: Bloomberg

U.S. Fixed Income: Quarterly Returns

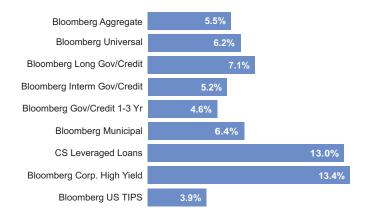
(12/31/23)



Sources: Bloomberg and Credit Suisse

U.S. Fixed Income: One-Year Returns

(12/31/23)



FIXED INCOME (Continued)

BBBs performed best for quarter and year

- AAA: +8.4%; +5.8%
- AA: +7.6%; +5.9%
- A: +8.0%; +7.3%
- BBB: +9.2%; +8.9%

Valuations

- Credit spreads close to historical averages
- Mortgage spreads widened on interest rate volatility and slowing prepayments.

Valuations vs. U.S. Treasuries richened

- 10-year AAA Muni/10-year U.S. Treasury yield ratio 59%, down from 75% as of 9/30
- Well below 10-year median of 87%
- After-tax yields remain attractive at 5.4% (source: Morgan Stanley).

Fundamentals for state, local governments remain sound

Upgrades exceeded downgrades in 2023.

Global Fixed Income

Falling rates bolstered 4Q returns globally

- Central banks seen as moving closer to cutting rates as inflation moderated
- Gains were broad-based across countries with the U.S. lagging other developed markets in unhedged terms.
- Emerging markets also posted strong results with gains across most countries.

U.S. dollar weakened

Major currencies rose compared to the dollar in 4Q.

Emerging markets also posted strong results

Gains across most countries

Change in 10-Year Global Government Bond Yields

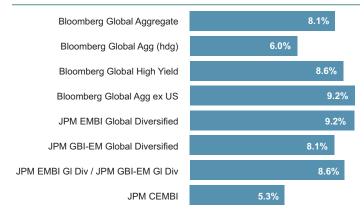
3Q23 to 4Q23



Source: Bloomberg

Global Fixed Income: Quarterly Returns

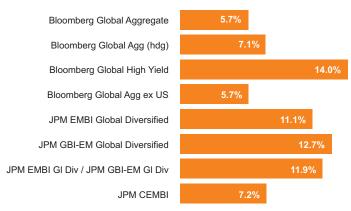
(12/31/23)



Sources: Bloomberg and JPMorgan Chase

Global Fixed Income: One-Year Returns

(12/31/23)



Sources: Bloomberg and JPMorgan Chase

Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS | Munir Iman

Private RE valuations reflect higher rates

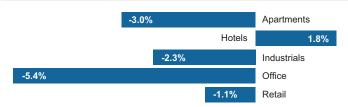
- The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 3.0% during 4Q23. The income return was 1.1% while the appreciation return was -4.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 1.8%.
- Office finished last with a loss of 5.4%.
- Regionally, the South led with a loss of 1.9%, while the West was the worst performer with a drop of 3.7%.
- The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 4.8% during 4Q, with an income return of 1.0% and an appreciation return of -5.8%.

REITs outperform equities

- The FTSE EPRA Nareit Developed REIT Index, a measure of global real estate securities, rose 15.6% during 4Q23.
- U.S. REITs, as measured by the FTSE Nareit Equity REITs Index, increased 16.2%.
- The FTSE EPRA Nareit Asia Index (USD), representing the Asia/Pacific region, gained 8.6%.
- European REITs, as measured by the FTSE EPRA Nareit Europe Index (USD), jumped 26.8%.
- U.S. REITs outperformed the S&P 500 (11.7%). They also topped Asia REITs but underperformed Europe.

Sector Quarterly Returns by Property Type





Source: NCREIF

- The outperformance in the U.S. was driven by dampening inflation, coupled with a more dovish Federal Reserve sentiment sparking a rally to close the year.
- The office sector outperformed, coming off its lows.
- Gaming, residential, health care, and data center lagged, impacted by interest rate challenges and prior strong performances.
- The FTSE EPRA Nareit Developed Asia Index (USD) rose 8.6% during the quarter. China's economic outlook remains uncertain, exacerbated by geopolitical tensions and underwhelming stimulus.
- The FTSE EPRA Nareit Developed Europe Index (USD) increased by 26.8% during the quarter.
- Europe was the top-performing region, driven by meaningful currency tailwinds. Expectations of a dovish central bank were driven by weakening economic data.

Callan Database Median and Index Returns* for Periods Ended 12/31/23

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	-0.4	-10.0	-10.0	4.9	4.7	7.0	5.2
NFI-ODCE (value-weighted, net)	-5.0	-12.7	-12.7	4.0	3.3	6.3	5.1
NCREIF Property	-3.0	-7.9	-7.9	4.6	4.3	6.8	6.4
NCREIF Farmland	2.3	5.0	5.0	7.4	6.0	7.3	9.4
NCREIF Timberland	4.3	9.5	9.5	10.5	6.6	5.8	4.7
Public Real Estate	·						
Global Real Estate Style	15.4	12.2	12.2	2.6	5.6	6.0	9.3
FTSE EPRA Nareit Developed	11.3	2.2	2.2	3.5	5.9	6.0	8.6
Global ex-U.S. Real Estate Style	15.4	9.0	9.0	-3.7	3.2	4.8	8.6
FTSE EPRA Nareit Dev ex US	14.9	6.3	6.3	-4.5	-0.5	1.0	5.6
U.S. REIT Style	16.5	14.0	14.0	6.8	8.8	8.6	11.6
FTSE EPRA Nareit Equity REITs	16.2	13.7	13.7	7.2	7.4	7.6	10.5

*Returns less than one year are not annualized. Sources: Callan, FTSE Russell, NCREIF

Big Slowdown After Frenzy of 2021

PRIVATE EQUITY | Ashley Kahn

Both new investment activity and exit activity slowed markedly in 2023, following rising interest rates, declines in the public markets, and continued price uncertainty.

Fundraising ► Fundraising declined back closer to historical levels in 2022 after its frenzied peak in 2021. So far, 2023 has been another down year, with LPs being more selective with their commitments.

Buyouts ► There was a significant decline in deal activity this year after the highs of 2021-2022, caused by high interest rates, a wide bid-ask spread, and lingering effects from the slowdown in the public markets. There was also greater difficulty in obtaining financing this year, particularly for mega buyout deals, which has brought down leverage ratios across the industry.

Buyout valuations are finally starting to normalize in 2023 after their peak in 2021. Buyout valuations are sensitive to changes in interest rates—as the cost of borrowing rises, it is harder to justify high valuations.

Venture Capital and Growth Equity ▶ There was a substantial decline in venture capital and growth equity activity in 2023, following the crazed highs of 2021 and early 2022. Valuations, likewise, have reverted back to historical levels, particularly at the late stage.

Exits Exits have declined dramatically after hitting all-time records in 2021. Only 8% of total private equity AUM generated liquidity in 2023 (the lowest level ever)-lower even than the depths of the Global Financial Crisis.

With the IPO window still closed and increasing antitrust sentiment, it is unclear whether exit activity will rebound in 2024. IPO exits in 2023 were at just 15% of pre-pandemic levels.

Returns Public equity's strong recovery in 2023 (led by the "Magnificent 7" technology stocks) has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

Funds Closed 1/1/23 to 12/31/23

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	1,584	199,090	21%
Growth Equity	139	103,324	11%
Buyouts	515	471,684	50%
Mezzanine Debt	24	36,050	4%
Distressed/Special Credit	42	46,018	5%
Energy	6	3,296	0%
Secondary and Other	137	74,616	8%
Fund-of-funds	25	5,567	1%
Totals	1,472	552,402	100%

Source: PitchBook (Figures may not total due to rounding.)

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/23*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	-2.4	-8.9	14.8	17.2	17.2	13.4	12.5	20.4
Growth Equity	-0.6	0.8	12.3	14.8	14.3	13.1	13.8	14.3
All Buyouts	0.1	10.2	16.8	15.0	14.6	12.4	14.6	12.8
Mezzanine	1.8	13.0	13.5	11.0	11.1	10.7	11.1	9.9
Credit Opportunities	1.2	8.2	11.1	7.1	7.5	10.1	9.3	9.6
Control Distressed	0.4	5.6	19.4	13.6	11.7	11.5	11.6	11.4
All Private Equity	-0.4	4.2	15.4	14.8	14.3	12.5	13.6	13.0
S&P 500	11.7	26.3	10.0	15.7	12.0	14.0	9.7	7.6
Russell 3000	12.1	26.0	8.5	15.2	11.5	13.8	9.7	7.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices

*Most recent data available at time of publication

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the Capital Markets Review and other Callan publications.

Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT | Catherine Beard

- Private credit performance varies across sub-asset class and underlying return drivers. Over the past three years the asset class has generated a net IRR of nearly 9%. Higher-risk strategies have performed better than lower-risk strategies.
- Private credit remained in high demand across Callan's investor base, and a number of large defined benefit plans are looking to increase their existing private credit allocations from 2%-3% to 5%-10%.
- While we always work to build out diversified client portfolios, we think there is particularly interesting relative value in upper middle market sponsor-backed lending and assetbased lending.

- We are seeing an uptick in stress for some individual names in direct lending portfolios due to a combination of input cost inflation and increased interest expense.
- Private credit AUM stood at over \$1.5 trillion at the end of 2023, with Pregin forecasting the asset class will grow to over \$2.5 trillion by 2028 at a 11.13% CAGR from 2023 to 2028.
- Direct lending is expected to grow steadily through 2028 as investors increase their private credit allocations. Distressed exposure will grow a bit more slowly with other strategies such as opportunistic, special situations, and other niche diversifiers growing more quickly.

Private Credit Performance (%) (Pooled Horizon IRRs through 9/30/23*)



Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 9/30/23*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	0.1	11.4	5.9	6.6	6.8
Mezzanine	1.8	13.0	11.0	11.1	10.5
Credit Opportunities	1.2	8.2	7.1	7.6	8.9

Source: LSEG/Cambridge

*Most recent data available at time of publication

Gains in 4Q23 Spurred by Rising Stocks and Bonds

HEDGE FUNDS/MACs | Joe McGuane

Equity markets ended the final guarter of 2023 with double-digit gains and, by the time the year ended, recouped all of 2022's losses. This surge was marked by rising expectations that the Federal Reserve was done hiking interest rates and would begin easing monetary policy in the new year. The yield on the U.S. 10-year Treasury declined sharply to end December at 3.9%, the same level where it began the year. Credit in general had a positive quarter, driven by lower rates and tighter spreads. Investment grade outperformed high yield, as both indices ended the quarter positive.

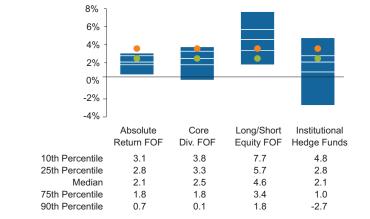
Hedge funds ended the year on a strong note. Equity hedge strategies were the best performing, as those with higher net long exposure performed better, along with strategies focused on health care and technology, media, and telecommunications (TMT). Relative value strategies generated positive performance during the quarter, driven by fundamental and systematic equity relative value strategies. Event-driven strategies

Hedge Fund Style Group Returns

(12/31/23)

3.6

2.5



3.6

2.5

3.6

Sources: Callan, Credit Suisse, Federal Reserve

3.6

HFRI Fund Wtd Index

90-Day T-Bills +5% •

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/23

Hedge Fund Universe	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years
Callan Institutional Hedge Fund Peer Group	2.1	7.5	7.5	5.6	7.1	5.8
Callan Fund-of-Funds Peer Group	2.9	6.9	6.9	4.0	5.6	4.2
Callan Absolute Return FOF Style	2.1	5.7	5.7	5.5	5.3	4.3
Callan Core Diversified FOF Style	2.5	6.8	6.8	3.7	5.7	3.6
Callan Long/Short Equity FOF Style	4.6	9.0	9.0	-0.2	6.1	5.2
HFRI Fund Weighted Index	3.6	7.6	7.6	4.3	7.0	4.5
HFRI Fixed Convertible Arbitrage	1.4	4.8	4.8	3.8	6.8	4.8
HFRI Distressed/Restructuring	3.2	6.7	6.7	5.7	6.3	4.0
HFRI Emerging Markets	4.2	8.1	8.1	0.1	4.8	3.1
HFRI Equity Market Neutral	1.4	5.6	5.6	4.6	3.2	2.9
HFRI Event-Driven	5.4	10.4	10.4	5.7	6.8	4.6
HFRI Relative Value	2.6	7.0	7.0	4.6	4.9	4.0
HFRI Macro	-1.1	-0.6	-0.6	5.3	5.5	3.1
HFRI Equity Hedge	5.6	10.5	10.5	3.5	8.3	5.2
HFRI Multi-Strategy	4.6	9.8	9.8	1.8	4.5	2.9
HFRI Merger Arbitrage	4.3	5.8	5.8	6.4	6.2	4.7
90-Day T-Bill + 5%	2.5	10.0	10.0	7.2	6.9	6.3

^{*}Net of fees. Sources: Callan, Credit Suisse, Hedge Fund Research

also ended on a strong note, as interest rate volatility provided trading opportunities when credit spreads tightened going into year-end. Macro strategies ended the quarter slightly negative, as losses from short positions in U.S. equities and developed market rates were offset by long technology equities and long front-end rates positions.

Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group rose 2.1%. Within this style group of 50 peers, the average hedged credit manager gained 2.6%, driven by actively trading around interest rate volatility. The median Callan Institutional hedged rates manager rose 2.3%, largely driven by relative value fixed income trades. Meanwhile, the average hedged equity manager added 2.2%, as sector-focused managers were able to profit from the broad market rally.

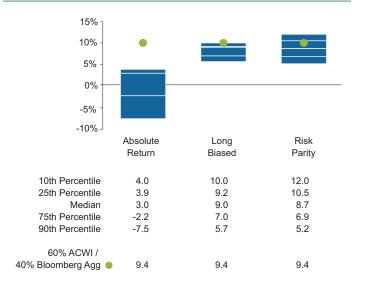
Within the HFRI indices, the best-performing strategy last quarter was equity hedge (5.6%), as health care-, financial-, and technology-focused strategies drove performance during the final quarter of the year. Macro strategies fell 1.1%, as short equity positions offset gains from front end interest rate trading.

Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF gained 4.6%, as sector-focused strategies drove performance during the quarter. The median Callan Core Diversified FOF rose 2.5%, boosted by equity and eventdriven strategies. The Callan Absolute Return FOF ended 2.1% higher, as lower equity beta strategies were behind this move higher.

Within Callan's database of liquid alternative solutions, the Callan MAC Long Biased manager rose 9.0%, as the broadbased equity rally moved performance higher. The Callan MAC Risk Parity peer group rose 8.7%, as equities and fixed income drove performance. The Callan MAC Absolute Return peer group rose, as broad markets had a strong end of the year.

MAC Style Group Returns

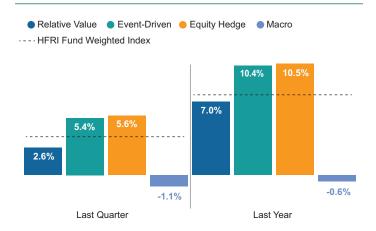
(12/31/23)



Sources: Bloomberg, Callan, Eurekahedge, S&P Dow Jones Indices

HFRI Hedge Fund-Weighted Strategy Returns

(12/31/23)



Source: HFRI

Index Drops by 2.9% After Three Quarters of Gains

DEFINED CONTRIBUTION | Scotty Lee

Performance: Index Dips after Third Straight Quarterly Gain

The Callan DC Index™ lost 2.9% in 3Q23, which brought the Index's trailing one-year gain to 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) had a lower guarterly return (-3.6%).

Growth sources: Investment Losses Lead to Fall in Balances

Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter. Investment losses (-2.9%) were the primary driver.

Turnover: Net Transfers Decrease

Turnover (i.e., net transfer activity levels within DC plans) in the DC Index decreased to 0.26% from the previous quarter's measure of 0.33%. Despite the decrease, the Index's historical average (0.55%) remained steady.

Net cash flow analysis: Stable Value Declines Sharply

Automatic features and their appeal to "do-it-for-me" investors typically result in target date funds (TDFs) receiving the largest net inflows in the DC Index, which was the case in 3Q23 as the asset allocation funds garnered 87.2% of quarterly net flows. Stable value (-56.2%) saw relatively large outflows for the fourth straight quarter.

Equity allocation: Exposure Declines

 The Index's overall allocation to equity (71.5%) fell slightly from the previous quarter's level (71.8%). The current equity allocation continues to sit above the Index's historical average (68.4%).

Asset allocation: Fixed Income, TDFs See Gains

U.S. fixed income (5.5%) and target date funds (34.1%) were among the asset classes with the largest percentage increases in allocation, while U.S small/mid cap equity (7.4%) had the largest decrease in allocation from the previous quarter due to net outflows.

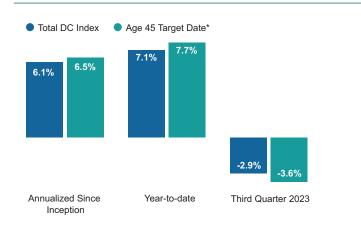
Prevalence: Money Market Up, Stable Value Down

- The prevalence of money market funds (54.1%) rose by 1.5% accompanied by a decrease in the prevalence of stable value funds (70.1%) by 0.8%.

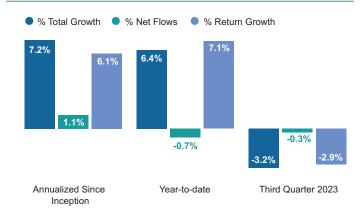
Underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets are tracked in the Callan DC Index.

Investment Performance

(9/30/23)



Growth Sources (9/30/23)



Net Cash Flow Analysis (3Q23)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	87.2%
Global ex-U.S. Equity	5.3%
U.S. Small/Mid Cap	-13.3%
Stable Value	-56.2%
Total Turnover**	0.3%

Data provided here is the most recent available at time of publication. Source: Callan DC Index

Note: DC Index inception date is January 2006.

- The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.
- ** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

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The Capital Markets Review is a quarterly macroeconomic indicator newsletter that provides thoughtful insights on the economy and recent performance in the equity, fixed income, alternatives, real estate, and other capital markets.

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