



Strong U.S. Economy Refuses to Cooperate

ECONOMY

GDP rose 2.8% in 3Q24 after an equally robust 2Q figure. Job creation has clearly slowed, but the unemployment rate is still low. Overall, economic growth is solid, yet a downbeat mood is pervasive, in seeming defiance of these sunny economic reports.

Rate Cut Spurs Rally With More Expected

FIXED INCOME

After the Fed cut rates 50 bps, fixed income rallied. The Fed "dot plot" expects two more cuts by year-end. The Aggregate had its second-best quarter in nearly 30 years. Global bonds also did well, and the U.S. dollar weakened against major currencies.

Managers Outperform Leveraged Loans

PRIVATE CREDIT

Private credit gained 1.8% in 2Q24. Fundraising, by number of funds, is off historical levels but capital raised is in line with the last few years. Interest in the asset class by institutional investors has stayed strong, especially by public DB plans.

Strong Year for Gains; Still Lag Benchmark

INSTITUTIONAL INVESTORS

All institutional investor types saw strong gains over the trailing one year ended 3Q24 but still lag a 60% stocks/40% bonds benchmark. Gains over longer time periods also lagged the benchmark. For institutional investors, their main focus now is on the Fed, after its first rate cut.

Funds See Gains and REITs Top Equities

REAL ESTATE/REAL ASSETS

After eight consecutive quarters of negative returns, valuations have adjusted to reflect higher borrowing costs. Income returns were positive across sectors and regions in 3Q24, with Hotels the top performer. All property sectors saw flat or positive appreciation, except for Office.

High Beta Managers Have Strong Quarter

HEDGE FUNDS/MACs

In 3Q, hedge funds had another strong performance, as strategies with higher beta to equity markets saw gains. Equity hedge strategies led returns, driven by generalist managers and those with a focus on health care. Multi-asset class (MAC) strategies also saw gains.

Record High in U.S. And Big Global Gains

EQUITY

The U.S. equity markets hit a record high after a disappointing start to 3Q24. But narrow leadership (the Magnificant Seven) continues to be an issue. Global markets outpaced U.S. markets, and global ex-U.S. markets did well as tech stocks in the U.S. faced pressure.

Fewer Funds but More Fundraising

PRIVATE EQUITY

The number of funds raised is significantly down, but the amount raised is higher than comparable periods in 2022 and 2023. Other activity has been similar to trends in 2023. Public equity outperformed private equity in the quarter, but not over longer time periods.

Index Gains Slow in 2Q24; Balances Up

DEFINED CONTRIBUTION

The Callan DC Index rose 1.7% in 2Q24.

Balances also rose, with investment gains the driver of the growth. U.S. large cap equity saw the largest percentage increases in allocation, while stable value had the largest decrease in allocation due to net outflows.

Broad Market Quarterly Returns

U.S. Equity Russell 3000



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



U.S. Fixed Income Bloomberg Agg



5.2%

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



8.5%

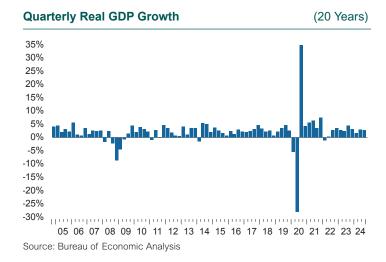
Sources: Bloomberg, FTSE Russell, MSCI

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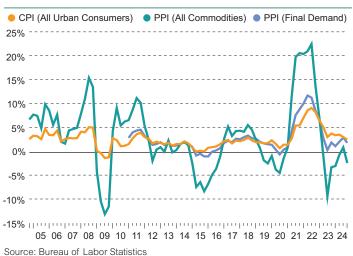
ECONOMY | Jay Kloepfer

Growth in the U.S. economy continues to defy a steady drumbeat of negative perception. Real GDP clocked a 2.8% rate of growth in 3Q24, after an equally robust 3.0% rate in 2Q. The rate of job creation has clearly slowed from that of 2022 and 2023, but September saw a monthly gain of 254,000, and the U.S. economy has averaged 200,000 new jobs per month so far this year. The rule of thumb in economics is that a rate of monthly job creation at or above 200,000 means the economy is expanding. The unemployment rate is still low at 4.1%, and weekly claims for unemployment benefits have dropped over the five months ending in September. So overall economic growth is solid, far stronger than expected at the start of the year, the job market is robust, and incomes and wages have risen substantially. Yet a downbeat mood is pervasive, in seeming defiance of these sunny economic reports.

Inflation has eased, but it doesn't feel like it to households and businesses alike. The cumulative impact on the cost of living from a generational spike in inflation looms large and is likely the chief culprit in the overall "bummer mood," to use the technical term, in the economy. The annual rate of inflation may have come back to 2.4% in September, but it is still positive, which means prices are still rising, just less quickly. Even if inflation goes to zero, prices will remain elevated; we'd need deflation to bring prices down. Deflation is kryptonite to economic policy. For businesses and government, the cost of goods and labor are now at substantially higher levels than four years ago. For households, higher wages help offset the higher costs of goods, services, and shelter, which is good. Average hourly earnings rose 20% between September 2020 and September 2024. However, the cost of new homes, rent, utilities, and groceries rose faster than wages over this period. Auto and home insurance are the new thorns in the consumer's side; the price index for auto insurance rose 16.3% year-over-year in September. The 2.4% rise in CPI in September was held down by a 15.3% drop in gasoline prices and similar declines in other energy-related sectors. Note that utility prices did not benefit from this drop in fuel prices over the past year, as they rose 3.4%.



Inflation Year-Over-Year



Digging through some of the details in the economic reports, the main driver of the strong 3Q GDP was consumer spending, spurred in large part by the strong job market. The leading categories of spending on services were health care (think outpatient services), hospitality, and accommodation; these are highly discretionary expenditures. Within goods, prescription drugs led non-durable goods, while motor vehicles and parts led durable goods spending. Business spending on equipment and intellectual property continued a long run of positive growth, likely driven in

part by the frenzy around Al. However, one of the main detractors to growth in 3Q24 was a reduction in inventory investment, the fifth negative quarter for inventory since the start of 2023. The steady drumbeat of a coming recession and Fed rate cuts may be to blame for spooking inventory investment. Finally, the housing market contracted for the second consecutive quarter, with "contraction" defined as a decline in residential housing investment. Housing prices remain elevated due to an unusual combination of high interest rates and limited supply. High rates would normally soften demand and push down prices, but the supply of homes for sale is limited, as existing homeowners choose to stay in their homes rather than face the higher cost of a new mortgage.

The Fed stepped up and cut interest rates 50 bps in September. only to now face the reality of a stronger economy than expected. The concern for some market participants is that the Fed move will spur exuberance in spending, and goose the stock market further, and this exuberance will potentially trigger a return of inflationary pressures, or at the least, slow the progress on bringing inflation down and keeping it there. The market sentiment on rate changes has been so far ahead of itself these past two years; it has become an unreliable narrator. If rates remain high for a while longer, that scenario suggests continuing economic growth—a good thing, right? If rates start to tail down, that scenario is often an indicator of growing economic problems. The challenge for Fed policy is that no elected official wants higher interest rates, at least not on their watch, and this is an election year.

The Long-Term View

		Р	eriods	Ended	9/30/24
Index	3Q24	1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	6.2	35.2	15.3	12.8	8.4
S&P 500	5.9	36.4	16.0	13.4	8.2
Russell 2000	9.3	26.8	9.4	8.8	8.3
Global ex-U.S. Equity					
MSCI EAFE	7.3	24.8	8.2	5.7	4.6
MSCI ACWI ex USA	8.1	25.4	7.6	5.2	
MSCI Emerging Markets	8.7	26.1	5.7	4.0	
MSCI ACWI ex USA Small Cap	8.9	23.3	8.2	6.1	6.8
Fixed Income					
Bloomberg Agg	5.2	11.6	0.3	1.8	4.1
90-Day T-Bill	1.4	5.5	2.3	1.6	1.9
Bloomberg Long G/C	8.0	17.2	-2.0	2.3	5.6
Bloomberg GI Agg ex US	8.5	12.3	-1.9	-0.5	2.6
Real Estate					
NCREIF Property	0.8	-3.5	3.3	5.9	7.7
FTSE Nareit Equity	16.1	34.7	5.5	7.8	10.1
Alternatives					
Cambridge PE*	1.0	4.6	13.8	13.1	12.7
Cambridge Senior Debt*	1.2	7.5	6.9	6.8	4.3
HFRI Fund Weighted	2.9	12.7	7.4	5.1	6.1
Bloomberg Commodity	0.7	1.0	7.8	0.0	2.2
Inflation – CPI-U	0.4	2.4	4.2	2.9	2.6

^{*}Data for most recent period lags. Data as of 2Q24.

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

Recent Quarterly Economic Indicators

	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23
Employment Cost: Total Compensation Growth	3.9%	4.1%	4.2%	4.2%	4.3%	4.5%
Nonfarm Business: Productivity Growth	2.2%	2.1%	0.7%	3.1%	3.8%	3.7%
GDP Growth	2.8%	3.0%	1.6%	3.2%	4.4%	2.4%
Manufacturing Capacity Utilization	76.8%	77.2%	77.1%	77.6%	78.1%	78.4%
Consumer Sentiment Index (1966=100)	68.1	71.1	78.4	64.9	69.6	62.3

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

Strong Year for Gains but Still Lag Benchmark

INSTITUTIONAL INVESTORS

- All institutional investor types saw extremely strong gains over the trailing one year ending 3Q24, counterbalanced by much weaker gains over the last three years.
- Despite that, they still continued to significantly lag stocks and a 60% stocks/40% bonds benchmark over shorter time frames.
- Nonprofits did best over the trailing one year, followed closely by corporate and public defined benefit (DB) plans, with Taft-Hartley plans lagging behind.
- Gains over the last 10 and 20 years significantly lagged the 60% stocks/40% bonds benchmark.
- For institutional investors, their primary focus now is on the Fed.
- After its first rate cut in over four years, are more cuts on the table?
- It is "much closer" to its 2% target, Fed Chair Jerome Powell said.

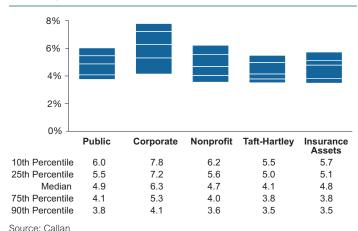
Public defined benefit (DB) plans

- Return enhancement and risk mitigation are the most significant concerns.
- Interest in private real estate has taken some twists and turns. It was low four years ago, then took two consecutive

- big jumps in our exclusive survey of Callan clients, dropped back down, and then spiked again.
- In a sharp reversal, there was a jump in the share of clients planning to increase global ex-U.S. equity allocations after a big share said they planned to cut allocations in 1Q24, according to our survey.
- There was almost no interest in changing allocations to other public markets asset classes, either increasing allocations or decreasing them.

Quarterly Returns, Callan Database Groups

(9/30/24)



Callan Database Median and Index Returns* for Periods Ended 9/30/24

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	4.9	19.4	4.7	8.5	7.5	7.4
Corporate Database	6.3	19.6	1.1	5.4	6.0	6.7
Nonprofit Database	4.7	19.9	4.6	8.5	7.1	7.2
Taft-Hartley Database	4.1	17.6	4.3	8.0	7.3	7.0
Insurance Assets Database	4.8	14.0	2.6	4.4	4.3	4.6
All Institutional Investors	5.0	19.4	4.1	7.9	7.1	7.1
Large (>\$1 billion)	4.6	17.5	4.1	8.3	7.4	7.3
Medium (\$100mm - \$1bn)	4.9	19.5	4.2	8.0	7.1	7.2
Small (<\$100 million)	5.2	20.6	4.1	7.8	6.8	6.8
60% S&P 500/40% Bloomberg Agg	5.6	26.1	6.6	9.9	8.9	8.0

^{*}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.

Corporate DB plans

- Pension risk transfer (PRT) is now the top issue, according to our survey.
- In 3Q21, we started asking consultants about corporate DB plans with a focus on three key areas: funded status, funded basis, and plan goals.
- For the first time, PRT was the top goal of corporate DB plans.
- Closing the funding gap, which had typically been the top goal, was No. 2 in 3Q24.
- The share of plans with a funded status above 100% has held fairly steady, with more than 4 of 10 plans at that level. And the vast majority of plans have a funded status above 91%.
- Funded basis has also held fairly steady, with every client this quarter citing projected benefit obligation (PBO).

Defined contribution (DC) plans

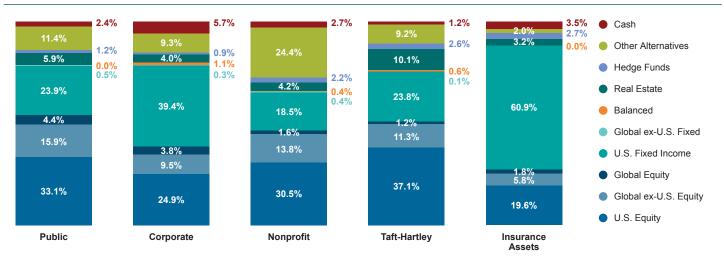
- Roughly 10% have a private real estate or real assets product in the target date fund, according to our survey.
- Fees remain the top issue for DC plans, as they have been for years.

- The percentage of clients with a private real estate or real assets product has held steady since 3Q21.
- Before that, nearly a fifth of plans on a consistent basis had such a product.
- Another issue coming to the forefront for many DC plan sponsors is retirement income.

Nonprofits

- They have little interest in changes to alternative asset allocations, our survey found.
- Nonprofit clients indicated they planned no or only small adjustments for every alternative asset class in 3Q24.
- The percentage of clients that planned to increase private equity fell to 0% from 11% in 1Q24.
- At the same time, the share planning to cut hedge fund allocations also fell, to 3% from 15%.
- Interest in adding to private real estate allocations also dropped after holding relatively steady since 1Q22 and hit the lowest level since 3Q21.

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

U.S. market reaches record high after spike in volatility

- The U.S. equity market had a disappointing start to 3Q24 as the S&P 500 Index dropped in July.
- But the market rallied in the last months of 3Q to end the quarter at a record high.
- All sectors within the S&P 500 posted positive returns over the quarter except for the Energy sector. As a result of the Fed's rate cut decision, the bond proxy sectors (Real Estate and Utilities) performed the best.
- During 3Q, value outperformed growth across the market cap spectrum. Small cap stocks outperformed large cap stocks.
- Narrow leadership continues to be an issue for U.S. stocks.
 YTD, the "Magnificent Seven" stock returns accounted for 45% of the returns of the S&P 500 Index.

Top performers have broadened out

- The "Magnificent Seven" stocks experienced increased volatility and mixed results in 3Q. Four of these stocks underperformed the S&P 500 Index.
- Better earnings growth expectations for the market relative to the "Magnificent Seven" could result in broader market leadership.
- Although the long-term trend may have reversed in the last quarter, a large percentage of S&P 500 Index returns since 2021 are attributable to the "Magnificent Seven."

Small cap valuations

 Small cap relative valuations are historically low across numerous forward and trailing valuation multiples.

- Small cap continues to trade at large discounts relative to large cap.
- This may be indicative of an attractive entry point for increased allocation.

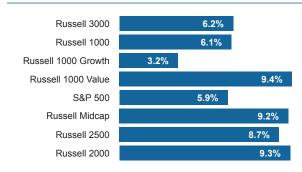
Global Equities

Global ex-U.S. markets outpace U.S. as technology lags

Global equity markets rose while central banks began easing monetary policy and cutting interest rates.

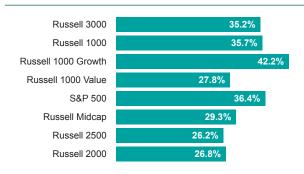
U.S. Equity: Quarterly Returns

(9/30/24)



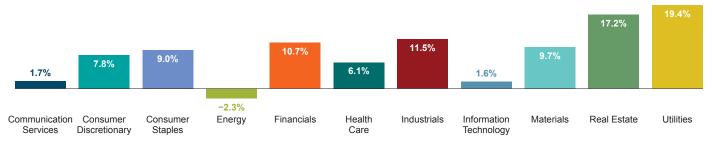
U.S. Equity: One-Year Returns

(9/30/24)



Sources: FTSE Russell and S&P Dow Jones Indices

Quarterly Performance of Industry Sectors (9/30/24)



Source: S&P Dow Jones Indices

- Market gains broadened to include more value stocks and previously underperforming sectors.
- Global ex-U.S. markets outpaced U.S. markets as the technology sector, a large portion of the U.S. market, faced pressure from AI spending scrutiny.
- Emerging markets outperformed developed markets with Asia being the strongest region within emerging markets.

Emerging markets

 China led a sharp rally higher in emerging markets after the Chinese government announced extensive stimulus measures aimed at tackling weakening economic activity, deflation, and its deteriorating property market.

Growth vs. value

Generally, value-oriented sectors led markets higher as the technology sector hindered growth concerns. One exception was China, as stimulus announcements boosted beaten-down Chinese tech companies.

U.S. dollar strength

 The U.S. Dollar Index (DXY) declined over 3Q amid a muchanticipated rate cut by the U.S. Federal Reserve.

Quality growth managers struggle

While outperforming in 2022, global quality growth managers have struggled since 2023, as high-growth names, often viewed as low-quality, have driven much of the market.

High growth rewarded last 18 months

- While high-growth managers were punished in 2022, they performed exceptionally well in 2023 and 2024.
- Still, on a three-year basis, quality growth managers have tended to outperform high-growth managers but still struggle against the ACWI index.

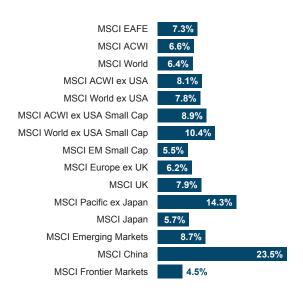
China's stimulus: what and why

 On Sept. 24, 2024, China announced a broad economic stimulus package. This is likely due to declining consumer sentiment and investor pressure.

Results

- Stock markets initially rallied between 10%-30%, moving into YTD gain territory. Valuations are still at 10-year lows.
- China has the worst pass-through from GDP growth to earnings and investor returns since 2010. While the stimulus may assist with GDP growth, it may not correlate to better stock performance.

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 9/30/24)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 9/30/24)



Source: MSCI

Fixed Income

U.S. Fixed Income

Rate cut spurs market rally

- The Fed lowered rates for the first time since 2020, reducing its overnight target by 50 bps; Fed "dot plot" indicates two more cuts by year-end.
- U.S. Treasuries fell across the curve; 10-year Treasury yield declined to 3.81% from 4.36% at the beginning of the quarter.
- The yield curve took a step toward normalization with the 2s/10s ending positive, though rates at the front-end remain elevated vs. intermediate- and long-term.

Performance and drivers

- The Bloomberg US Aggregate Index gained 5.2%, the second-best quarter in nearly 30 years, led by the rally in rates.
- Investment grade corporates and all securitized sectors outperformed U.S. Treasuries on a duration-adjusted basis.
- High yield corporate excess returns (+1.7%) outpaced investment grade corporate excess returns (+0.8%).

Valuations

- Despite significant widening in late July, both IG and HY spreads ended tighter over the quarter.
- HY defaults declined to 1.8%, while bank loans rose to 3.1%, widening the gap between them to the highest since 2014.
- New issuance continued to be strong, adding \$424 billion in IG and \$78 billion in HY debt.

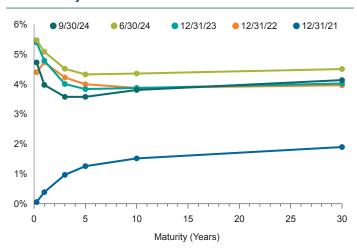
Munis posted gains but underperformed U.S. Treasuries

Bloomberg Municipal Bond Index (+2.7%) vs. Bloomberg US
 Treasury Index (+4.7%)

AAA-rated muni yield curve normalized

- 2-year and 10-year AAA rates fell by 77 bps and 23 bps, respectively; spread now +24 bps
- Maximum inversion of -50 bps was April 2024.
- Followed path of U.S. Treasury yield curve, which also normalized during the quarter (2-year vs 10-year)

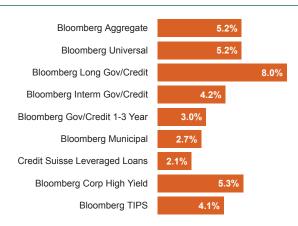
U.S. Treasury Yield Curves



Source: Bloomberg

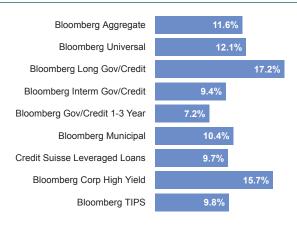
U.S. Fixed Income: Quarterly Returns

(9/30/24)



U.S. Fixed Income: One-Year Returns

(9/30/24)



Sources: Bloomberg and Credit Suisse

FIXED INCOME (Continued)

Muni valuations vs. U.S. Treasuries remain rich

- 10-year AAA Muni/10-year U.S. Treasury yield ratio rich relative to 10-year median (69% now vs. 85% historical)
- Need for increased infrastructure spending could benefit municipal bond issuance in years to come

Corporate new debt issuance remains robust

- Investment-grade corporate issuers continued the surge of new debt, issuing \$424 billion in 3Q, bringing the total YTD to more than \$1.3 trillion, already more than 7 of the last 10 years. At the current pace, new issuance will surpass \$1.7 trillion by year-end, the second-highest total on record.
- High yield new issuance was also robust, with approximately \$78 billion issued over the quarter. This brings the total issuance YTD to nearly \$250 billion, more than each of the last two calendar years.

Global Fixed Income

Macro environment

- Developed market rates declined as growth and inflation expectations moved lower.
- Several central banks cut rates over the quarter while the Bank of Japan unexpectedly raised its target to 0.25%, its highest rate since 2008.

U.S. dollar weakens

- The U.S. dollar weakened relative to major currencies, reversing the trend from the first half of the year and enhancing returns for unhedged investors.
- Within the U.S. Dollar Index (DXY), Japanese yen saw the largest relative gain, rising 12% vs. the U.S. dollar.

Emerging market debt posts strong quarter

- EM central banks broadly continued their easing policies, though Brazil raised its rate and signaled future hikes.
- The rally in EM currencies enhanced returns for EM debt, with the JPM GBI-EM Global Diversified Index gaining 9.0%.

Change in 10-Year Global Government Bond Yields

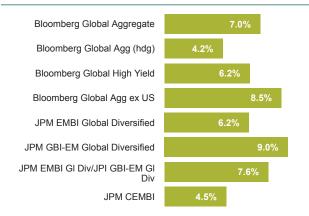
2Q24 to 3Q24



Source: Bloomberg

Global Fixed Income: Quarterly Returns

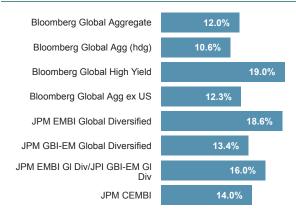
(9/30/24)



Sources: Bloomberg and JPMorgan Chase

Global Fixed Income: One-Year Returns

(9/30/24)



Sources: Bloomberg and JPMorgan Chase

Funds See Gains and REITs Top Equities

REAL ESTATE/REAL ASSETS | Munir Iman

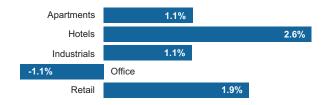
Valuations reflect higher interest rates

- After eight consecutive quarters of negative returns, valuations have adjusted to reflect higher borrowing costs.
- Income returns were positive across sectors and regions in 3Q24, with Hotels the top performer.
- All property sectors experienced flat or positive appreciation, except for Office, which dropped 2.5%.

REITs top equities

- Global REITs outperformed in 3Q24, up 16.1% compared to a 6.4% increase for global equities (MSCI World).
- U.S. REITs gained 16.0% in 3Q24, in contrast with the S&P 500 Index, which rose 5.9%.
- REITs are trading at a premium to NAV (+2.0%) for the first time since January 2022.
- Historically, global REITS have traded at a -3.8% discount to NAV.

Sector Quarterly Returns by Property Type (9/30/24)



Source: NCREIF

Over \$250 billion in dry powder

- ODCE redemption queues are approximately 18.9% of net asset value, with a median queue of 15.0%. This compares to the GFC when queues peaked at approximately 15% of net asset value (NAV).
- Outstanding redemption requests for most large ODCE funds are approximately 6% to 33% of NAV (with one outlier at 56%).
- For a large proportion of funds, these redemptions are partial redemptions, due to portfolio rebalancing and liquidity needs.
 For a smaller underperforming subset, redemption requests are full redemptions indicative of manager termination.

Pricing, transaction volumes on the rise

- Transaction volume is increasing on a rolling four-quarter basis yet remains below five-year averages.
- In 3Q24, transaction volume increased slightly on a quarterover-quarter basis. Transaction volume remains significantly lower compared to 2022.
- The rise in interest rates is the driving force behind the slowdown in transactions. Increasing transactions are driven by rising confidence in multi-family and industrial values.
 Valuations have largely adjusted to higher borrowing costs.

Callan Database Median and Index Returns* for Periods Ended 9/30/24

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	20 Years
Private Real Assets	Quarter	fear to Date	ı tear	3 fears	o rears	10 fears	20 fears
Real Estate ODCE Style	0.1	-2.8	-8.0	-0.6	2.4	5.6	5.6
NFI-ODCE (value-weighted, net)	0.0	-3.2	-8.0	-1.0	2.1	5.2	5.7
NCREIF Property	0.8	-0.5	-3.5	0.9	3.3	5.9	7.2
NCREIF Farmland	-0.2	0.3	2.6	6.2	5.6	6.7	12.0
NCREIF Timberland	1.5	5.4	10.0	10.9	7.5	5.9	7.1
Public Real Estate							
Global Real Estate Style	15.9	13.2	31.1	2.0	4.0	6.4	7.5
FTSE EPRA Nareit Developed	13.9	15.2	28.2	6.1	4.8	6.3	
Global ex-U.S. Real Estate Style	16.1	10.8	29.7	-2.1	2.1	5.0	
FTSE EPRA Nareit Dev ex US	16.8	8.0	24.1	-4.0	-1.6	1.6	
U.S. REIT Style	15.9	15.3	33.7	4.3	6.4	8.4	8.9
FTSE EPRA Nareit Equity REITs	16.1	15.9	34.7	5.1	5.5	7.8	8.1

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

Fewer Funds but More Fundraising

PRIVATE EQUITY | Ashley Kahn

Fundraising ► The first half of 2024 showed mixed signals in terms of fundraising. The number of funds raised is significantly down from years prior, but the amount raised actually exceeds the first halves of both 2022 and 2023. As was the case in 2023, capital continues to concentrate with larger funds. Small venture capital funds, which historically make up a large portion of the number of funds raised, have experienced the greatest challenges fundraising today.

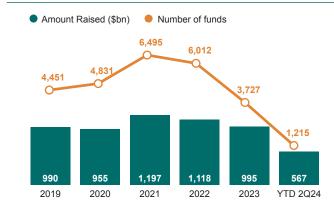
Buyouts ▶ Buyout activity levels in 2024 are similar to 2023, which represents a return to the pre-pandemic activity levels of 2019. In hindsight, 2021-22 appear to be the exceptional years, characterized by exuberance in deal activity, while 2023-24 are much closer to historical levels.

Venture Capital and Growth Equity ▶ The first half of 2024 represents a continuation of the slower pace of activity in 2023, although managers are generally more optimistic about making new investments. This year has seen a notable recovery in late-stage valuations. Companies able to raise followon financing typically do so at an up round. Similarly, earlystage valuations in 2024 rose by 25% from the prior year.

Exits ► The first half of 2024 represents a continuation of the slower pace of exits in 2023, although managers are generally more optimistic about seeking an exit this year. Both

Annual Fundraising

(6/30/24)



Source: Pltchbook

IPOs and M&A exits are down in 1H24 compared to 1H23 by roughly 10%. Persistent buyer-seller valuation gaps continue to dampen exit activity, and the interest rate cut is not yet reflected in the 2Q24 data.

Returns Public equity's exceptional performance in the first half of the year (led by the "Magnificent Seven" technology stocks) has left private equity in its wake. Private equity returns are not as volatile as the public markets, and private equity doesn't typically outperform when public equity is at record highs (it likewise doesn't drop as sharply when public equity drops). Over the long term, private equity consistently outperforms public equity by 1%-3%.

Private Equity Performance (%) (Pooled Horizon IRRs through 6/30/24*)

		_	-			
Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
All Venture	-0.8%	-1.3%	-3.2%	14.7%	15.0%	12.4%
Growth Equity	1.4%	4.1%	0.2%	13.4%	13.0%	13.4%
All Buyouts	1.4%	6.6%	6.8%	14.8%	13.3%	14.0%
Mezzanine	2.3%	9.4%	9.3%	11.2%	10.9%	11.3%
Credit Opportunities	1.8%	8.5%	7.6%	8.5%	7.2%	9.2%
Control Distressed	0.6%	2.8%	9.0%	13.4%	10.7%	11.3%
All Private Equity	1.0%	4.6%	3.8%	14.0%	13.0%	13.1%

Note: Private equity returns are net of fees. Sources: LSEG/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.

Outperformed Leveraged Loans over 5, 10, and 20 Years

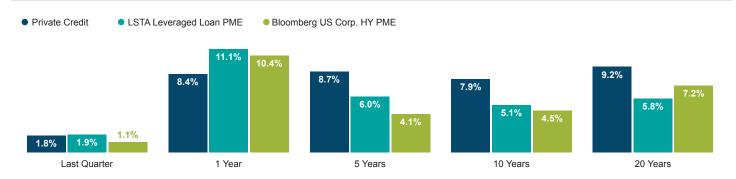
PRIVATE CREDIT | Cos Braswell and Daniel Brown

Private credit gained 1.8% in 2Q24, the most recent guarter available, roughly even with a leveraged loan index and above a high yield index. Over longer time periods it has handily outperformed both indices. Fundraising, by number of funds, is off historical levels but capital raised is in line with the last few years. Interest in the asset class by institutional investors has stayed strong.

- Private credit performance varies across sub-asset class and underlying return drivers. Over the past 10 years the asset class has generated a net IRR of 7.9% as of 2Q24, outperforming leveraged loans. Higher-risk strategies have performed better than lower-risk strategies.
- The number of funds closed in 2Q24 was the lowest we've seen in years; however, aggregate capital raised is in line with the last few years and outpaced historical quarters.
- While direct lending continues to dominate fundraises, we are noticing increased interest in specialty finance strategies for more mature PC portfolios.

- Private credit stayed in high demand among Callan clients, and a number of large DB plans are looking to increase their allocations from 2%-3% to 5%-10%.
- Private credit AUM stood at over \$1.5 trillion at the end of 2023, with Pregin forecasting the asset class could grow to over \$2.5 trillion by 2028. Private credit AUM growth is expected to remain steady across geographies. While CAGR grew at about 17.5% from 2016 to 2022, CAGR is forecasted at 11.1% from 2024 to 2028.
- About 90% of investors expect either to maintain or increase their allocation in the next year.
- Direct lending is expected to grow steadily through 2028 as investors increase their private credit allocations. Distressed exposure should grow a bit more slowly with other strategies such as specialty finance and other niche diversifiers growing more quickly.

Private Credit Performance (%) (Pooled Horizon IRRs through 6/30/24*)



Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 6/30/24*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	1.2	7.5	7.1	7.1	7.3
Subordinated	2.3	9.4	11.2	10.9	11.2
Credit Opportunities	1.8	8.5	8.5	7.2	9.0
Total Private Credit	1.8	8.4	8.7	7.9	9.2

Source: LSEG/Cambridge

*Most recent data available at time of publication

Higher Beta Hedge Fund Strategies Have a Strong Quarter

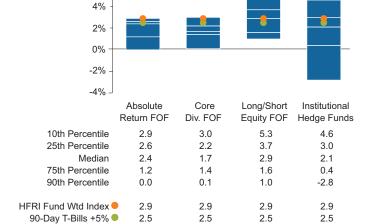
HEDGE FUNDS/MACs | Joe McGuane

The market backdrop served as a strong tailwind for most hedge fund strategies in 3Q24. U.S. equity markets ended a volatile quarter higher, driven by strong corporate earnings and the Federal Reserve's larger-than-expected interest rate cut in September. Credit indices saw gains across the board, with investment grade and high yield bond indices outperforming levered loans. Emerging, European, and Asian markets were mixed. Within emerging markets, China outperformed its peers due to improved investor sentiment following the government's announcement of a monetary stimulus package.

In 3Q, hedge funds had another strong performance, as strategies with higher beta to equity markets saw gains. Equity hedge strategies led returns, driven by generalist managers and those with a focus on health care. Relative value strategies were positive, as performance was driven by fundamental and systematic equity relative value. Event-driven strategies also had a strong quarter, as a focus on deep value companies and mergers drove performance. Macro strategies ended slightly lower, as gains from long positions in U.S., European, and U.K.

Hedge Fund Style Group Returns

(9/30/24)



Sources: Callan, Credit Suisse, Federal Reserve

rates, fixed income relative value trading in the U.S., and long gold were offset by losses from shorting Japanese rates, long positions in the U.S. dollar, and going long Japanese equities.

Callan Peer Group Median and Index Returns* for Periods Ended 9/30/24

Hedge Fund Universe	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Callan Institutional Hedge Fund Peer Group	2.1	9.4	5.9	7.5	6.7	7.3
Callan Fund-of-Funds Peer Group	1.9	10.3	4.3	6.2	4.6	5.0
Callan Absolute Return FOF Style	2.4	9.6	5.4	6.1	4.5	4.9
Callan Core Diversified FOF Style	1.7	10.3	4.4	6.3	4.1	4.9
Callan Long/Short Equity FOF Style	2.9	13.6	1.9	6.5	5.7	5.7
HFRI Fund Weighted Index	2.9	12.7	4.0	7.4	5.1	5.1
HFRI Fixed Convertible Arbitrage	3.6	10.9	4.9	7.1	5.5	5.7
HFRI Distressed/Restructuring	3.6	13.1	4.1	7.7	4.7	5.9
HFRI Emerging Markets	4.7	14.9	1.0	5.6	4.0	3.8
HFRI Equity Market Neutral	1.5	9.8	5.2	4.4	3.6	3.2
HFRI Event-Driven	4.6	13.4	4.5	7.4	5.1	5.8
HFRI Relative Value	2.6	9.4	4.3	5.1	4.2	5.3
HFRI Macro	-0.6	3.9	4.3	5.2	3.2	2.6
HFRI Equity Hedge	4.0	17.4	3.6	9.0	6.1	5.9
HFRI Multi-Strategy	4.7	13.5	2.2	6.5	3.6	4.1
HFRI Merger Arbitrage	3.5	7.5	4.4	6.0	4.9	4.4
90-Day T-Bill + 5%	2.6	10.5	8.5	7.3	6.6	6.1

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

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 member rose 2.1%. Within this style group of 50 peers, the average hedge credit manager gained 2.9%, driven by interest rate volatility. Meanwhile, the average hedge equity manager added 0.3%, as those focused on health care, utilities, and real estate drove performance. The median Callan Institutional hedge rates manager rose 2.9%, largely driven by relative value fixed income trades.

Within the HFRI indices, the best-performing strategy in 3Q24 was event-driven, which was up 4.6%, as managers were able to profit off their positioning to out-of-favor equities. Equity hedge strategies gained 4.0%, as managers benefited from dispersion in utilities, health care, and real estate. Relative value strategies were up 2.6% due to the Fed lowering interest rates. Macro strategies were down 0.6%, as a weakening dollar offset gains from rates positioning during the quarter.

Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF ended 2.9% higher, as managers with a more generalist approach were able to profit off dispersion across sectors. Meanwhile, the median Callan Core Diversified FOF gained 1.7%, as equity and event-driven strategies drove performance. The median Callan Absolute Return FOF gained 2.4%, as a higher allocation to relative value strategies drove performance.

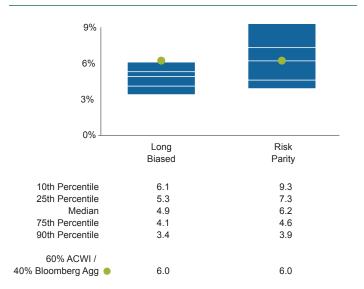
Since the Global Financial Crisis, liquid alternatives to hedge funds have become popular among investors for their attractive risk-adjusted returns that are similarly uncorrelated with traditional stock and bond investments but offered at a lower cost.

Within Callan's database of liquid alternative solutions, the median Callan MAC Long Biased manager rose 4.9%, as the strong equity rally pushed performance higher. The Callan MAC Risk Parity peer group rose 6.2%, as equities and fixed income positioning drove performance.

If consensus expectations are met for a sustained stable growth and low inflation environment, markets can continue to grind higher, and corporate profit margins and balance sheets for the largest companies can remain healthy. With markets priced close to perfection, one bad data point can cause markets to sell off. Against this current backdrop, Callan is focused on managers with the skill to generate alpha both on the long and short side across equities, fixed income, rates, currencies, and commodities.

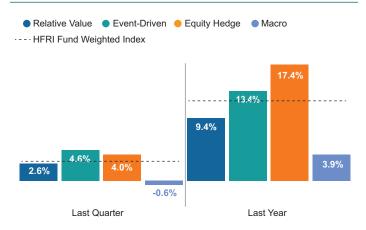
MAC Style Group Returns

(9/30/24)



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

HFRI Hedge Fund-Weighted Strategy Returns (9/30/24)



Source: HFRI

Index Gains Slow in 2Q24

DEFINED CONTRIBUTION | Scotty Lee

Performance: Index gains slow in 2Q24

The Callan DC Index™ gained 1.68% in 2Q24, which brought the Index's trailing one-year gain to 15.3%. The Age 45 Target Date Fund (analogous to the 2045 vintage) had a higher quarterly return (1.74%).

Growth Sources: Balances rise due to investment gains

Balances within the DC Index rose by 1.1% after a 6.6% increase in the previous quarter. Investment gains (1.7%) were the driver of the gain, while net flows (-0.6%) had a contrary effect.

Turnover: Net transfers fall

Turnover (i.e., net transfer activity levels within DC plans) in the DC Index decreased to 0.17% from the previous guarter's measure of 0.44%. The Index's historical average (0.54%) remained steady.

Net Cash Flow Analysis: TDFs remain in top spot

Target date funds (TDFs) garnered 75.8% of quarterly net flows. Within equities, investors withdrew assets from U.S. large cap equity (-32.6%) and U.S. small/mid-cap equity (-18.7%). Notably, stable value (-29.6%) saw relatively large outflows for the seventh consecutive guarter.

Equity Allocation: Exposure rises

 The Index's overall allocation to equity (73.7%) rose slightly from the previous quarter's level (73.5%).

Asset Allocation: Fixed income exposure falls

U.S. large cap equity (28.5%) and target date funds (35.6%) were among the asset classes with the largest percentage increases in allocation, while stable value (6.4%) had the largest decrease in allocation from the previous quarter due to net outflows.

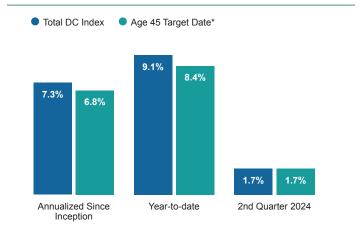
Prevalence of Asset Class: Global equity funds fall

The prevalence of global equity funds (17.9%) fell by 2.1 percentage points along with a decrease in the prevalence of emerging markets (17.9%) by 1.4 percentage points.

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.

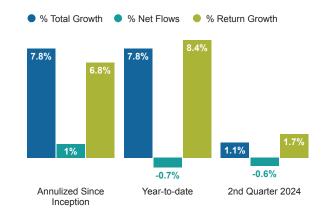
Investment Performance

(6/30/24)



Growth Sources

(6/30/24)



Net Cash Flow Analysis 2Q24)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	75.9%
Brokerage Window	12.4%
Stable Value	-29.6%
U.S. Large Cap	-32.6%
Total Turnover**	0.2%

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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