

Guide to Alternatives®

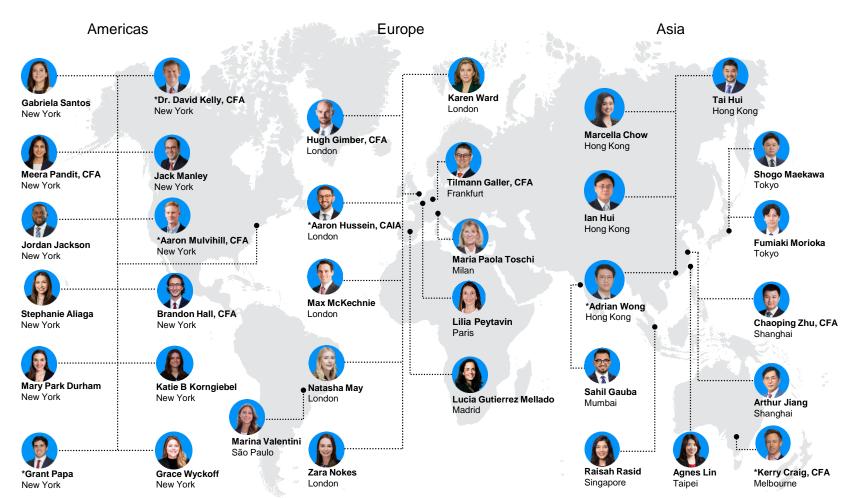
4Q 2025 As of November 30, 2025





Global Market Insights Strategy Team

GTA MI 2



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J.P.Morgan
ASSET MANAGEMENT



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Earnings/coupon yield and the 60/40

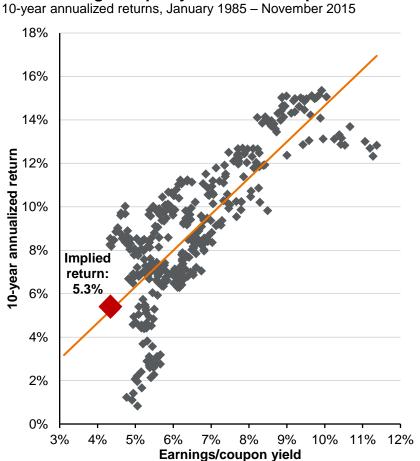
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Earnings/coupon yield on a 60/40 portfolio

Blended S&P 500 forward E/P ratio and Bloomberg U.S. Agg. YTW



60/40 earnings/coupon yield and subsequent returns



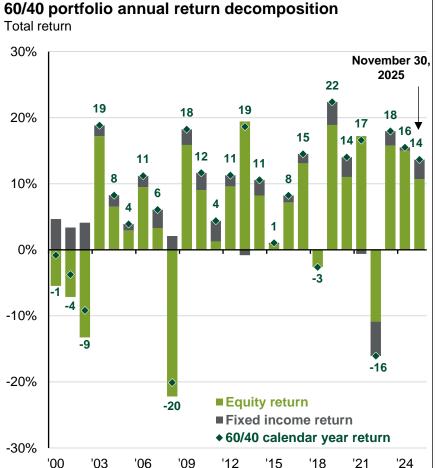
Source: Bloomberg, FactSet, IBES, Standard & Poor's, Thomson Reuters, J.P. Morgan Asset Management. (Left) Valuation is calculated by summing 60% weight to earnings yield on the S&P 500 (inverse of forward P/E) and a 40% weight to the yield to worst on the U.S. Aggregate. Earnings yield is the forward earnings yield (consensus analyst estimates of EPS over the next 12 months divided by price) as provided by IBES since December 1984 and by FactSet since January 2022. (Right) Returns are based on a 60% weighting in the S&P 500 Total Return Index and a 40% weighting in the U.S. Aggregate Total Return index. 60/40 is rebalanced annually. Returns are 120-month annualized total returns, measured monthly, beginning 12/31/1984. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.





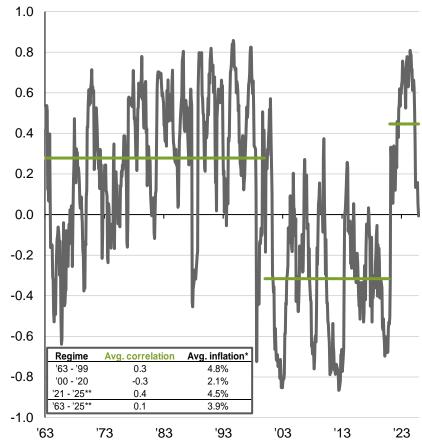
60/40 returns and stock-bond correlation

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S&P 500 / U.S. 10-year Treasury correlation

Rolling 12-month correlation based on monthly total returns



Source: Bloomberg, FactSet, Haver Analytics, LSEG, Standard & Poor's, J.P. Morgan Asset Management. (Left) The 60/40 portfolio is 60% invested in the S&P 500 Total Return Index and 40% invested in the Bloomberg U.S. Aggregate Total Return Index. (Right) *Simple average of the year-over-year percent change in headline CPI during each period. For the current month's inflation data, we use the most recent headline CPI figures until the latest data are available. **2025 data are as of 11/30/2025. Past performance is not a reliable indicator of current and future results.

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60/40 portfolio income generation

GTA MI 6



60/40 portfolio yield minus the year-over-year % change in core CPI, monthly



Source: Bloomberg, FactSet, Standard & Poor's, J.P. Morgan Asset Management.

Total 60/40 real yield may not sum due to rounding. 60/40 portfolio nominal yield is calculated by taking the sum of the S&P 500's dividend yield and the yield to worst of the Bloomberg U.S. Aggregate multiplied by their respective weights in the portfolio. Analysis is based on month-end data. For the current month, we use the most recent core CPI figures until the latest data are available. Past performance is not a reliable indicator of current and future results.

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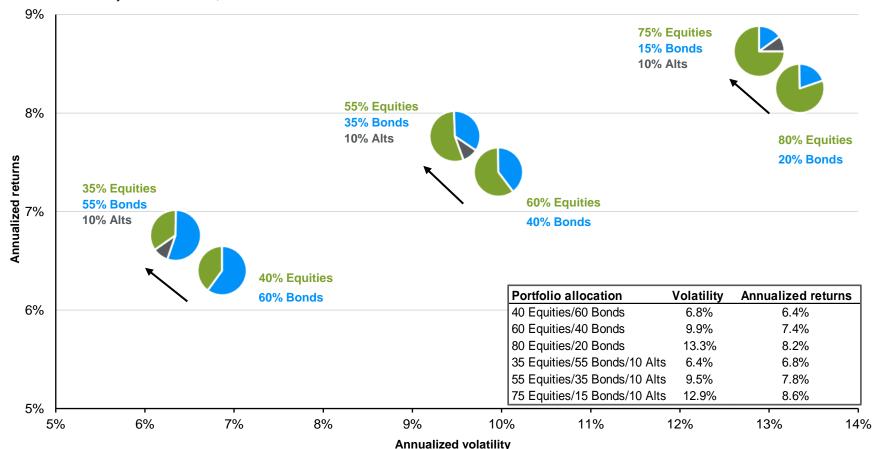
Portfolio diversification

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Alternatives and portfolio risk/return

Annualized volatility and total return, 1Q98 - 2Q25



Source: Burgiss, Bloomberg, FactSet, NCREIF, PivotalPath, Standard & Poor's, J.P. Morgan Asset Management. The alternatives allocation includes hedge funds, real estate and private equity, with each receiving an equal weight. Portfolios are rebalanced at the start of the year. Equities are represented by the S&P 500 Total Return Index. Bonds are represented by the Bloomberg U.S. Aggregate Total Return Index. Volatility is calculated as the annualized standard deviation of quarterly returns. Past performance is not a reliable indicator of current and future results.

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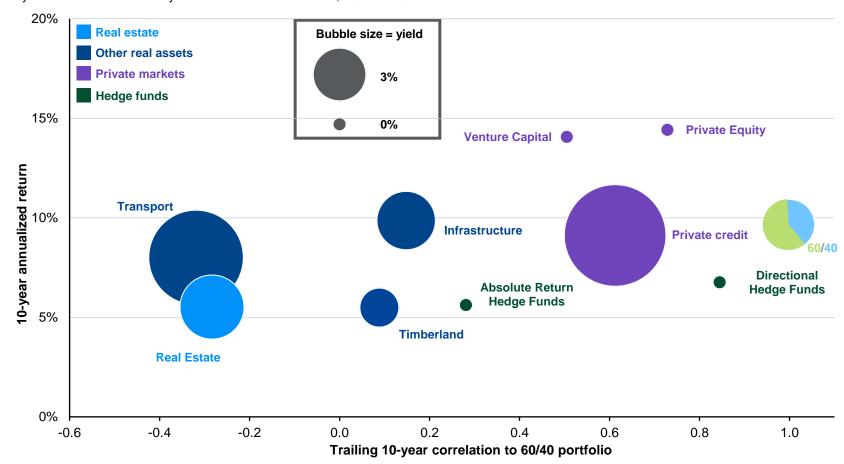


Alternatives: Correlations, returns and yields

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Correlations, returns and yields

10-year correlations and 10-year annualized total returns, 3Q15 - 2Q25



Source: Burgiss, Cliffwater, FactSet, MSCI, NCREIF, PivotalPath, J.P. Morgan Asset Management.

Guide to Alternatives. Data are based on availability as of November 30, 2025.

All categories are global, except for timberland and private credit, which are U.S. Correlations are based on quarterly returns over the time period indicated. A 60/40 portfolio is comprised of 60% stocks and 40% bonds. Stocks are represented by the S&P 500 Total Return Index. Bonds are represented by the Bellomberg U.S. Aggregate Total Return Index. Bonds are represented by the Bellomberg U.S. Aggregate Total Return Index. Bonds are represented by the Bellomberg U.S. Aggregate Total Return Index. Bonds are represented by the Bellomberg U.S. Aggregate Total Return Index. Bloomberg U.S. Aggregate Tot



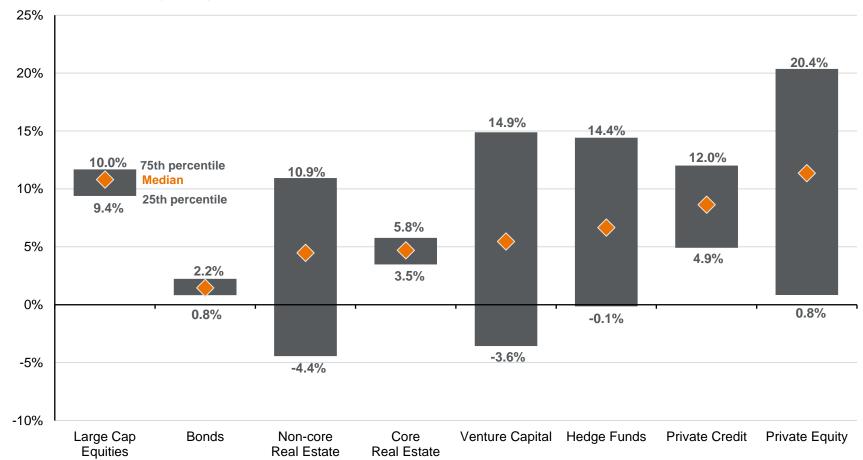


Alternatives and manager selection

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Public and private manager dispersion

Based on returns from 3Q15 - 3Q25*



Source: Burgiss, Morningstar, MSCI, PivotalPath, J.P. Morgan Asset Management.

Guide to Alternatives. Data are based on availability as of November 30, 2025.

All categories are global. Large Cap Equities and Bonds are based on the Morningstar Global Large Stock Blend and Global Bond (not hedged) categories, respectively. Core Real Estate is based on the MSCI Global Property Fund Index. Private Credit, Non-core Real Estate, Private Equity and Venture Capital are based on indices from the MSCI Private Capital Universe. Hedge Funds are based on the Pivotal Path index. Manager dispersion is based on annual returns over the 10-year period indicated for: Large Cap Equities, Bonds and Hedge Funds. *Manager dispersion is based on annual returns over the 10-year period ending 2Q25 for Core Real Estate. Manager dispersion is based on the 10-year internal rate of return (IRR) ending 2Q25 for: Private Credit, Non-core Real Estate, Private Equity and Venture Capital. Past performance is not a reliable indicator of current and future results.





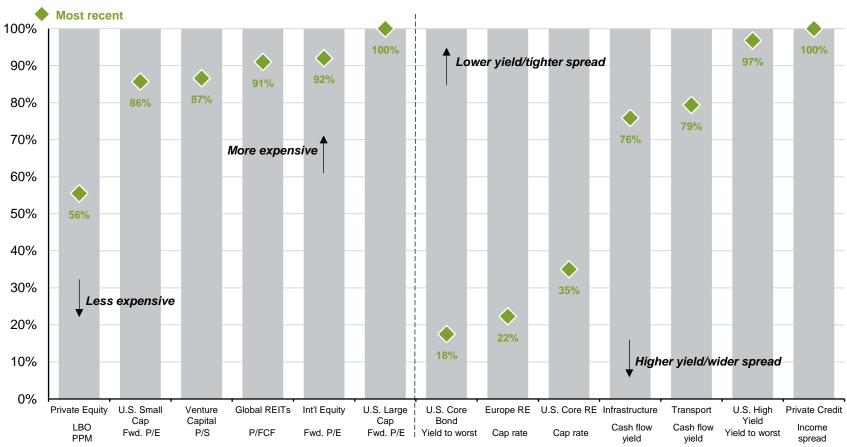
Valuations monitor

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Asset class valuations

Percentile rank relative to valuations since December 2009*



Source: Burgiss, Cliffwater, FactSet, Jay Ritter – University of Florida, J.P. Morgan Markets, MSCI, NCREIF, PitchBook Data, Inc, RCA, J.P. Morgan Asset Management. All asset class valuation measures are quarterly and are inclusive of the latest available data, except VC, which is annual. Equity valuations are measured using next 12 months P/E ratios. Fixed income valuations are measured using yield to worst and spread to worst. Global REITs valuations are measured using price-tofree cash flow (P/FCF) multiples. Real estate valuations are measured using transaction-based cap rates. Private equity valuations are determined using leveraged buyout purchase price multiples (LBO PPM). Private credit valuations are measured using the spread between quarterly income returns and 3-month SOFR (LIBOR pre-2019). VC valuations measured using the median VC-backed IPO price-to-sales (P/S) ratio. Infrastructure valuations are measured using 12month trailing infrastructure income returns, *Global REITs average valuation is since 3/31/2010. Past performance is not a reliable indicator of current and future results.

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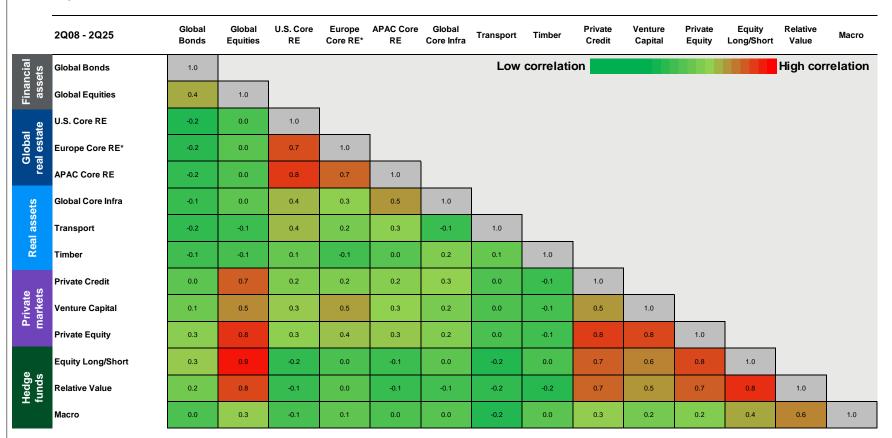


Public and private market correlations

GTA MI 11

Public and private market correlations

Quarterly returns



Source: Bloomberg, Burgiss, Cliffwater, MSCI, NCREIF, PivotalPath, J.P. Morgan Asset Management.

*Europe Core RE includes continental Europe. RE: real estate. Global equities: MSCI AC World Index. Global Bonds: Bloomberg Global Aggregate Index. U.S. Core Real Estate: NCREIF Property Index – Open End Diversified Core Equity component. Europe Core Real Estate: MSCI Global Property Fund Index – Continental Europe. Asia Pacific (APAC) Core Real Estate: MSCI Global Property Fund Index – Asia-Pacific. Global infrastructure (Infra.): MSCI Global Private Infrastructure Asset Index. Transport returns are derived from a J.P. Morgan Asset Management index. Timber: NCREIF Timberland Property Index (U.S.). Private Credit: Cliffwater Direct Lending Index. Private Equity and Venture Capital are time-weighted returns from Burgiss. Hege fund indices are from PivotalPath. All correlation coefficients are calculated based on quarterly total return data for the period indicated. Returns are denominated in USD. Past performance is not a reliable indicator of current and future results. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.



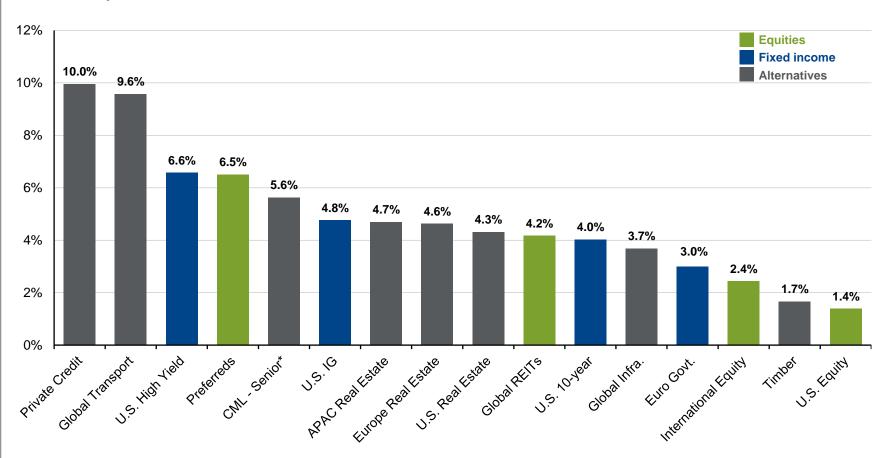


Yield alternatives

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Asset class yields



Source: BAML, Bloomberg, FactSet, Federal Reserve, FTSE, KBRA DLD, MSCI, NCREIF, Wells Fargo, J.P. Morgan Asset Management. *CML is commercial mortgage loans tracked by the Gilberto-Levy Commercial Mortgage Index, Equities and fixed income yields are as of 11/30/2025. Alternative yields are as of 6/30/2025, except CML - Senior, which is as of 9/30/2025, CML - Senior. Market-capitalization weighted average for all mortgages in the Gilberto-Levy Commercial Mortgage Index, Global Transport: Levered yields for transport assets calculated as the difference between charter rates (rental income), operating expenses, debt amortization and interest expenses, as a percentage of equity value, and are based on a historical 15-year average. Yields for each of the sub-vessel types are calculated and respective weightings are applied to arrive at the current levered yields for Global Transportation; Preferreds: BAML Hybrid Preferred Securities; Private Credit: KBRADLD Index; U.S. High Yield: Bloomberg U.S. Aggregate Corporate High Yield; Global Infrastructure: MSCI Global Private Infrastructure Asset Index; Global REITs; FTSE NAREIT Global REITs; International Equity: MSCI AC World ex-U.S.; U.S. 10-year: 10-year U.S. Treasury yield; U.S. Equity: S&P 500 trailing twelve months' dividend yield: Europe Real Estate: Market weighted-avg, of MSCI Global Property Fund Indices – U.K. & Cont. Europe; U.S. and Asia Pacific (APAC) core real estate: MSCI Global Property Fund Index. Euro Govt.: Bloomberg Euro Aggregate Government - Treasury (7-10Y); Timber: NCREIF Timberland Index (U.S.) - EBITDA Return, Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.



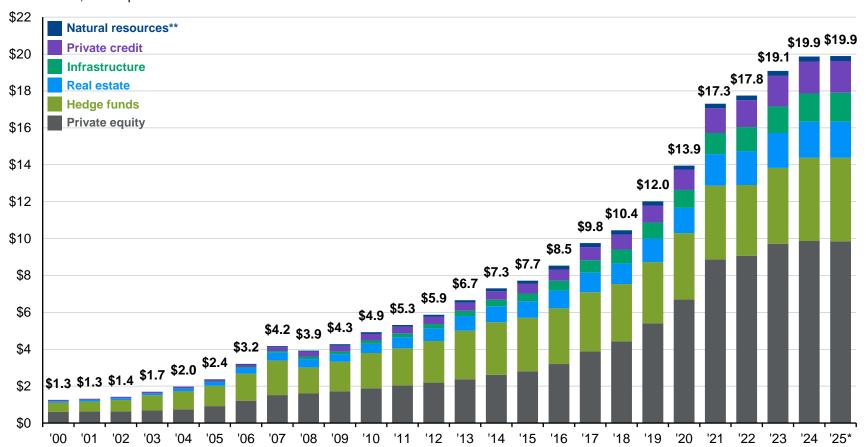


Assets under management

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Global alternative assets under management

USD trillions, end of period



Source: HFR, Preqin, J.P. Morgan Asset Management.

*2025 data are as of 1Q25. **Natural resources includes energy, timberland, agriculture and farmland, metals and mining, water and diversified business. Assets under management is defined as managed assets in private closed-end funds, which includes the latest available valuation of investments (including unrealized value), as well as committed capital available for investment by fund managers.

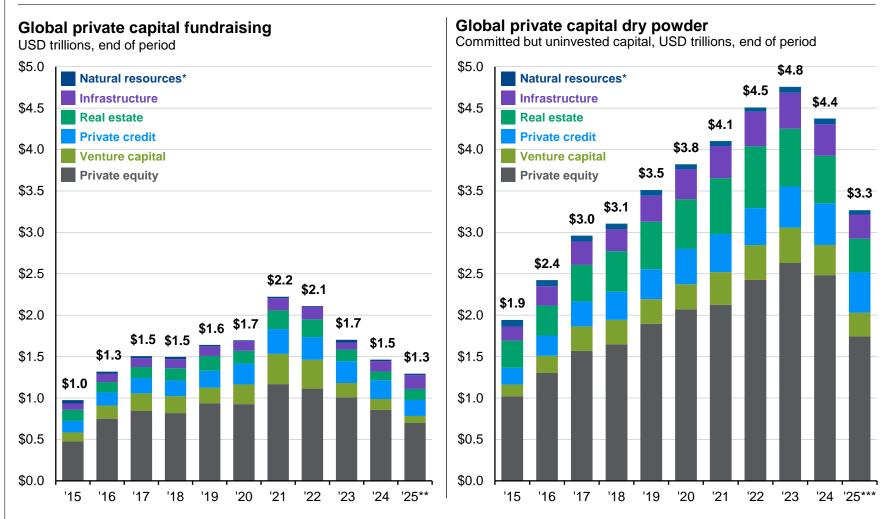
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Alternatives fundraising and dry powder

GTA MI 14



Source: Pregin, J.P. Morgan Asset Management.

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^{*}Natural resources includes energy, timberland, agriculture and farmland, metals and mining, water and diversified business. (Left)
Fundraising data are latest as of 11/30/2025. Fundraising categories are provided by Preqin and represent its estimate of annual capital raised in closed-end funds. Data may not sum to total due to rounding. (Right) *Dry powder data are latest as of 3Q25. Dry powder refers to committed but uninvested limited partner (LP) capital.

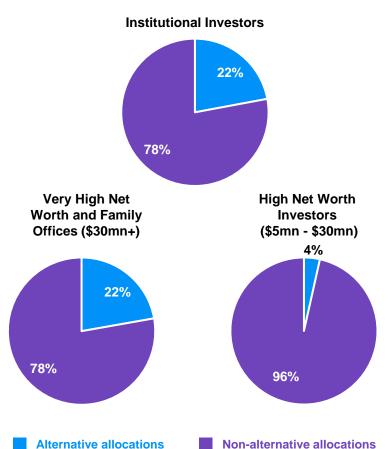


Investor positioning

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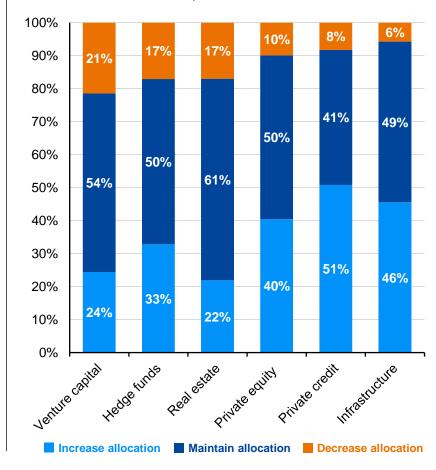


Alternatives asset allocation by investor type



Long-term alternatives allocation plans

Share of institutional investors, June 2025



Source: Bain and Company, Preqin, J.P. Morgan Asset Management. (Left) Institutional Investor allocations data sourced from Preqin's 2025 Institutional Allocation Study. Simple average allocation is calculated using data across 4,129 investors representing \$22.4tn in AUM. Very High Net Worth and Family Offices and High Net Worth investor data sourced from Bain and Company's "Global Private Equity Report 2024." (Right) Preqin H2 2025 Investor Outlook.

Guide to Alternatives. Data are based on availability as of November 30, 2025.





Alternative asset class returns vs. selected portfolios

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											2015 – 2024	
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2Q25	Ann.	Vol.*
Infra.	Infra.	Private Equity	Venture Capital	60/40 Portfolio	Venture Capital	Venture Capital	Transport	60/40 Portfolio	60/40 Portfolio	Venture Capital	Venture Capital	Venture Capital
15.5%	14.2%	23.0%	21.2%	22.4%	58.5%	49.9%	12.1%	18.0%	15.5%	7.3%	14.2%	13.1%
U.S. Core RE	Private Equity	Venture Capital	Infra.	Venture Capital	Private Equity	Private Equity	Infra.	50/30/20 Portfolio	50/30/20 Portfolio	Transport	Private Equity	60/40 Portfolio
15.0%	12.2%	14.8%	11.6%	20.5%	24.0%	37.3%	9.6%	15.3%	14.1%	6.9%	14.0%	10.3%
Venture Capital	Private Credit	60/40 Portfolio	Europe Core RE	50/30/20 Portfolio	60/40 Portfolio	U.S. Core RE	U.S. Core RE	Private Credit	Private Credit	Private Equity	Infra.	50/30/20 Portfolio
15.0%	11.2%	14.5%	9.9%	20.3%	14.0%	22.2%	7.5%	12.1%	11.3%	6.3%	10.3%	8.8%
Europe Core RE	APAC Core RE	50/30/20 Portfolio	APAC Core RE	Private Equity	50/30/20 Portfolio	50/30/20 Portfolio	APAC Core RE	Private Equity	Infra.	60/40 Portfolio	Private Credit	Private Equity
12.8%	10.4%	14.3%	9.3%	16.8%	13.9%	17.7%	6.8%	9.7%	10.7%	5.3%	9.0%	8.5%
APAC Core RE	U.S. Core RE	Infra.	Private Equity	Infra.	Hedge Funds	60/40 Portfolio	Private Credit	Transport	Hedge Funds	50/30/20 Portfolio	50/30/20 Portfolio	Hedge Funds
11.8%	8.8%	12.2%	8.9%	11.5%	11.4%	16.6%	6.3%	8.9%	10.6%	5.2%	8.7%	5.9%
Transport	50/30/20 Portfolio	APAC Core RE	U.S. Core RE	Europe Core RE	Transport	Europe Core RE	Hedge Funds	Infra.	Transport	Private Credit	60/40 Portfolio	U.S. Core RE
8.8%	8.5%	11.5%	8.3%	9.3%	6.8%	14.2%	-1.1%	7.9%	7.5%	4.5%	8.1%	5.6%
Private Equity	60/40 Portfolio	Transport	Private Credit	Private Credit	Private Credit	Private Credit	Private Equity	Hedge Funds	Private Equity	Hedge Funds	Transport	Transport
8.8%	8.2%	10.6%	8.1%	9.0%	5.5%	12.8%	-1.4%	7.6%	5.6%	4.0%	7.9%	4.7%
Private Credit	Europe Core RE	Europe Core RE	Transport	Hedge Funds	Europe Core RE	APAC Core RE	Europe Core RE	Venture Capital	Venture Capital	Infra.	Europe Core RE	Europe Core RE
5.5%	8.1%	9.8%	5.2%	9.0%	4.9%	11.8%	-2.4%	-2.1%	5.4%	4.0%	6.5%	4.1%
50/30/20 Portfolio	Transport	Private Credit	50/30/20 Portfolio	APAC Core RE	U.S. Core RE	Infra.	50/30/20 Portfolio	APAC Core RE	Europe Core RE	Europe Core RE	APAC Core RE	Infra.
3.0%	7.8%	8.6%	-0.4%	6.6%	1.2%	10.5%	-12.6%	-2.3%	4.7%	3.0%	6.4%	3.2%
Hedge Funds	Hedge Funds	Hedge Funds	Hedge Funds	U.S. Core RE	APAC Core RE	Transport	60/40 Portfolio	Europe Core RE	APAC Core RE	APAC Core RE	U.S. Core RE	APAC Core RE
2.5%	5.0%	8.0%	-1.6%	5.3%	0.4%	10.3%	-16.1%	-4.9%	-0.9%	2.7%	5.9%	3.0%
60/40 Portfolio	Venture Capital	U.S. Core RE	60/40 Portfolio	Transport	Infra.	Hedge Funds	Venture Capital	U.S. Core RE	U.S. Core RE	U.S. Core RE	Hedge Funds	Private Credit
1.1%	0.6%	7.6%	-2.6%	1.5%	0.2%	7.8%	-20.6%	-12.0%	-1.4%	2.1%	5.8%	2.9%

Source: Bloomberg, Burgiss, Cliffwater, FactSet, MSCI, NCREIF, PivotalPath, J.P. Morgan Asset Management.

Private Equity: MSČI Global Buyout Closed-End Fund Index. Venture Capital: MSCI Global Venture Capital Closed-End Fund Index. Hedge funds: Pivotal Path Composite Index. Transport returns are derived from a J.P. Morgan Asset Management index and are shown on an unlevered basis, which can be enhanced by adding leverage. U.S. Core RE: NCREIF Property Index - Open End Diversified Core Equity component, Europe Core Real Estate: MSCI Global Property Fund Index - Continental Europe, Asia Pacific (APAC) Core Real Estate: MSCI Global Property Fund Index - Asia-Pacific, Private Credit: Cliffwater Direct Lending Index. Global infrastructure (Infra.): MSCI Global Private Infrastructure Asset Index. A 50/30/20 portfolio is both the 60/40 portfolio and the 50/30/20 portfolio are represented by the Bloomberg U.S. Aggregate Total Return Index. Alternatives in the 50/30/20 portfolio are represented by an equal-weight asset allocation mix of the returns from the other nine alternatives asset classes on the chart. Annualized return (Ann.) and volatility (Vol.) represents the 40-quarter ASSET MANAGEMENT period ending 12/31/2024, *Volatility calculated as the annualized standard deviation of guarterly returns. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.



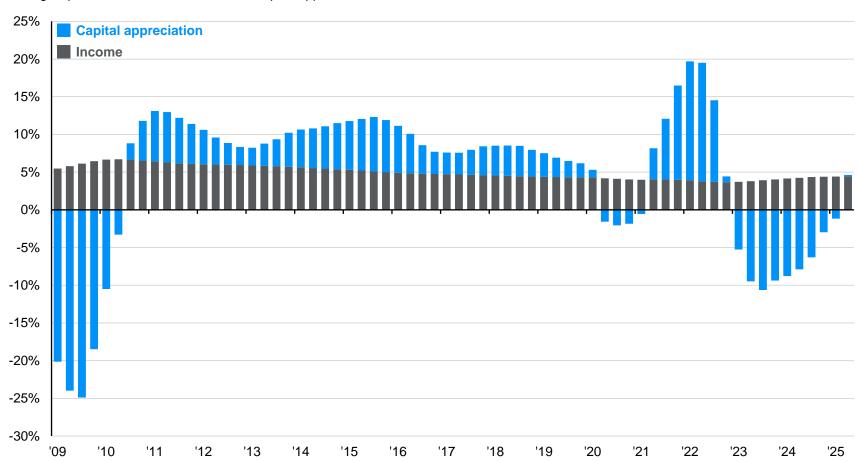


Sources of global private real estate returns

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Global private real estate returns

Rolling 4-quarter returns from income and capital appreciation



Source: MSCI, J.P. Morgan Asset Management.

Real estate returns represented by the MSCI Global Property Fund Index. Data show rolling four-quarter returns from income and capital appreciation. The chart shows the full index history, beginning in 1Q09. Past performance is not a reliable indicator of current and future results. *Guide to Alternatives.* Data are based on availability as of November 30, 2025.



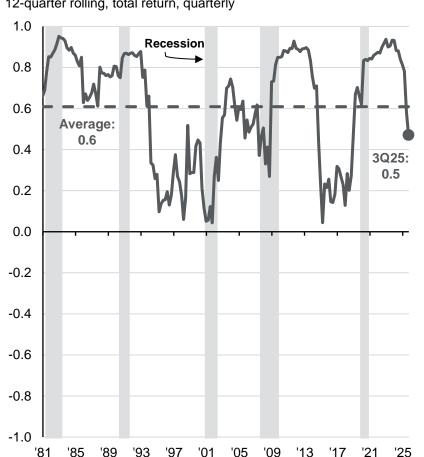


Real estate correlation to equities

GTA MI 18

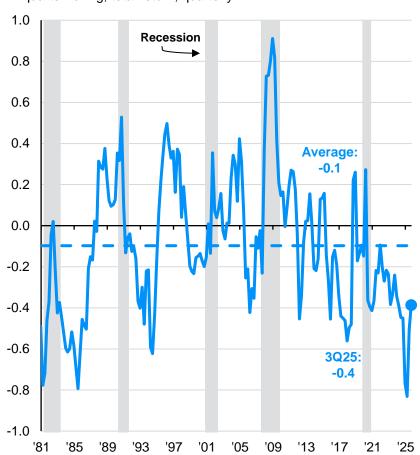


12-quarter rolling, total return, quarterly



Direct real estate correlation to S&P 500

12-quarter rolling, total return, quarterly



Source: FactSet, NAREIT, NCREIF, Standard & Poor's, J.P. Morgan Asset Management. The S&P 500 is represented by the S&P 500 total return index. Indices do not include fees or operating expenses and are not available for actual investment. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.



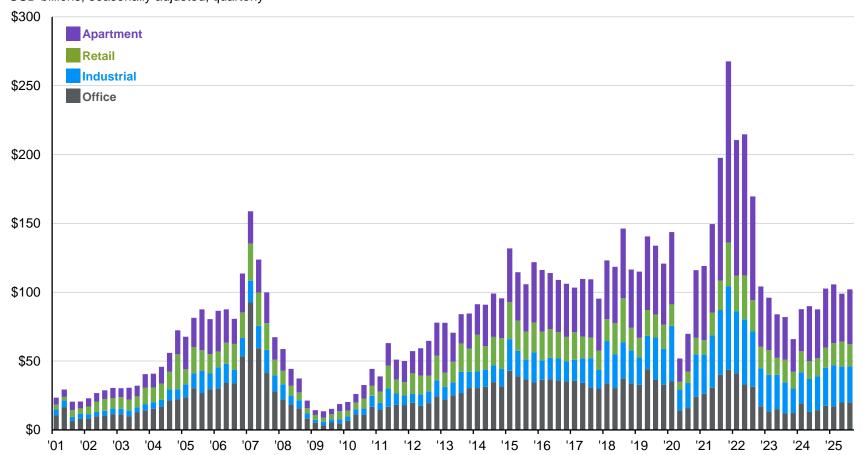


U.S. real estate: Transaction volumes

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U.S. real estate transaction volumes

USD billions, seasonally adjusted, quarterly



Source: RCA, J.P. Morgan Asset Management. Guide to Alternatives. Data are based on availability as of November 30, 2025.



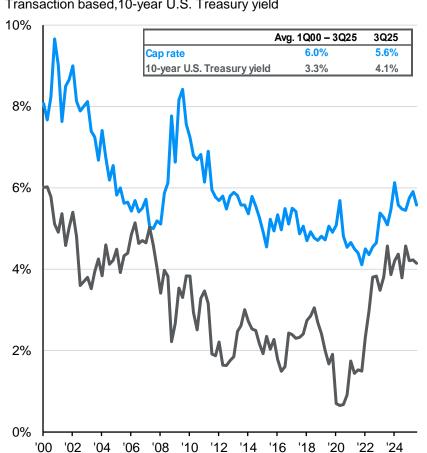


U.S. real estate: Cap rates and property prices

GTA MI 20

U.S. real estate cap rates and interest rates

Transaction based, 10-year U.S. Treasury yield



U.S. commercial real estate property prices Year-over-year % change 30% All property Apartment Industrial Retail 20% 10% 0% -10% -20% -30%

Source: Apollo Global Management, Bloomberg, LSEG Datastream, MSCI, NCREIF, J.P. Morgan Asset Management, (Left) The cap rate is calculated as the net operating income over sales price. It is transaction based and value weighted. (Right) The RCA Commercial Property Price Indices are transaction-based indices that measure property prices at a national level. Property price data are as of 11/30/2025. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.

-40%

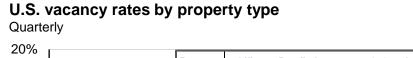
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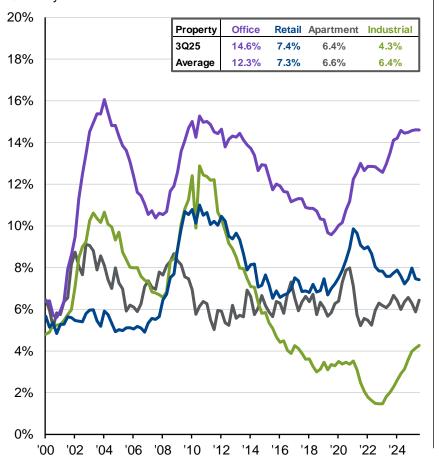




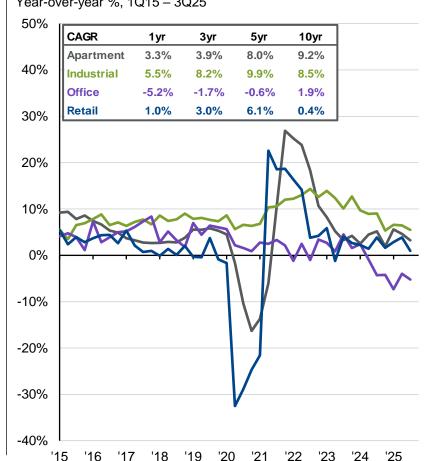
U.S. real estate: Vacancy rates and NOI growth

GTA MI 21





Net operating income growth by property type Year-over-year %, 1Q15 – 3Q25



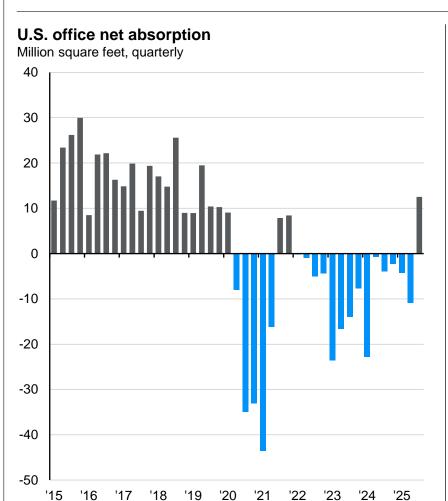
Source: NCREIF, J.P. Morgan Asset Management. (Right) Annualized returns are calculated to 3Q25. Past performance is not a reliable indicator of current and future results. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.





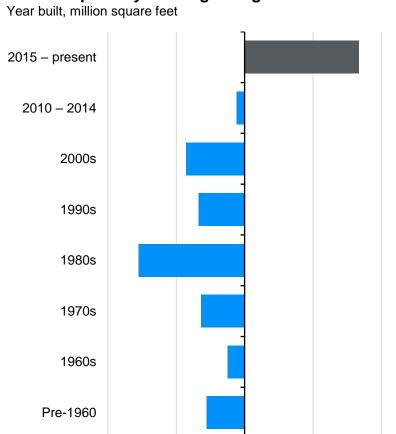
U.S. real estate: Office leasing activity

GTA MI 22



Source: CoStar, JLL, J.P. Morgan Asset Management. (Right) Data is sourced from the "U.S Office Market Dynamics, October 2025" report. *Guide to Alternatives.* Data are based on availability as of November 30, 2025.

Net absorption by building vintage



Cumulative net absorption since 2Q20 (million square feet)

0

-100

-200



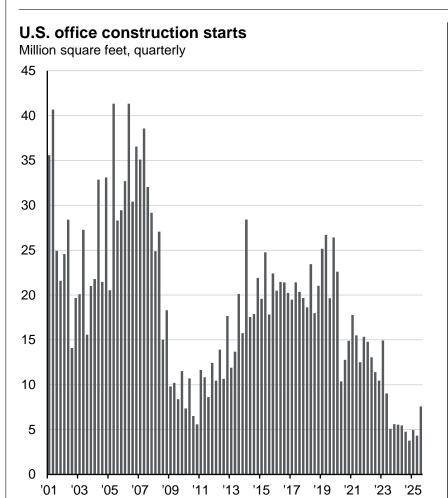
200

100

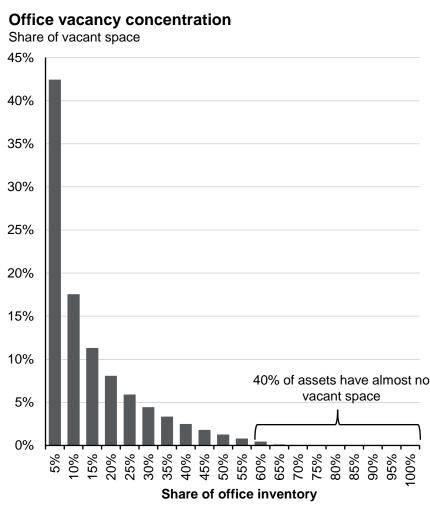


U.S. real estate: Office supply

GTA MI 23









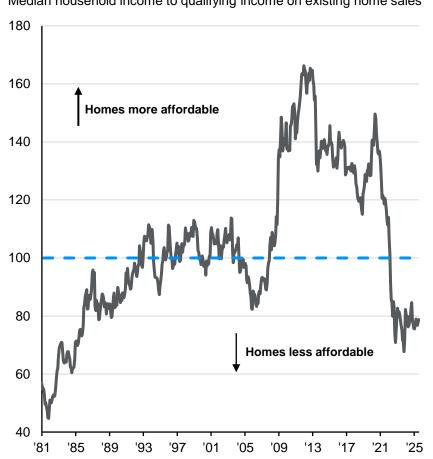


U.S. housing affordability

GTA MI 24



Median household income to qualifying income on existing home sales



Single-family home owning vs. renting cost USD, monthly \$4,000



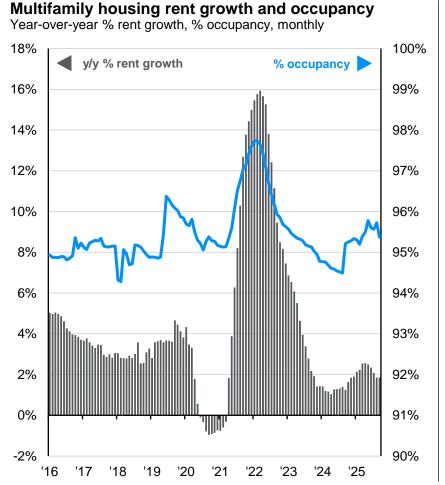
Source: Census Bureau, Fannie Mae, John Burns Research and Consulting, J.P. Morgan Asset Management. (Left) Ratio of median household income to qualifying income on existing home sales price. Qualifying income = 4 * annual mortgage cost. (Right) Owning: Total housing costs from monthly home payment plus annual maintenance costs. Payment is based on a 5% down payment, a 30-year fixed-rate mortgage at the monthly rate listed on the Freddie Mac website, PITI (principal, interest, taxes and insurance) payment plus a mortgage insurance payment. Maintenance costs range from 0.85% to 1.25% of the home price set in 2014 and historically adjusted for inflation, factored in monthly. Renting: Burns Single-Family Rent Index, which represents the median market asking rent for move-in-ready, 3-bedroom single family homes. Guide to Alternatives. Data are based on availability as of November 30, 2025.





U.S. multifamily housing trends

GTA MI 25



Construction starts vs. deliveries*, thousands, quarterly

Deliveries
Starts

150

Multifamily housing completions

Source: CoStar, RealPage, J.P. Morgan Asset Management.

(Right) *Deliveries are lagged by six quarters to construction starts. The six-quarter lag represents the average lead time for a project to go from groundbreaking to delivery.

50

'01

Guide to Alternatives. Data are based on availability as of November 30, 2025.

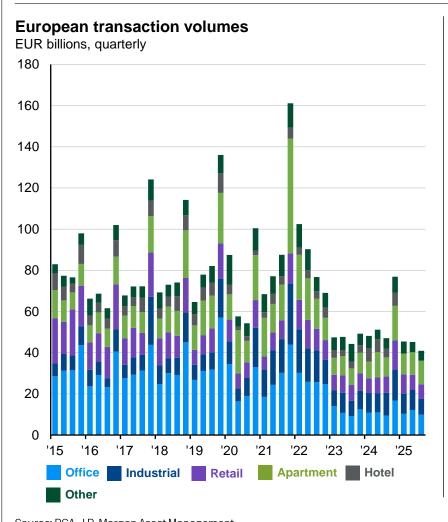


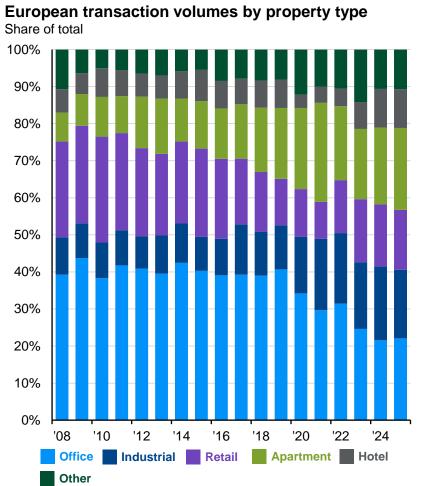
'21



Europe real estate: Transaction volumes

GTA MI 26





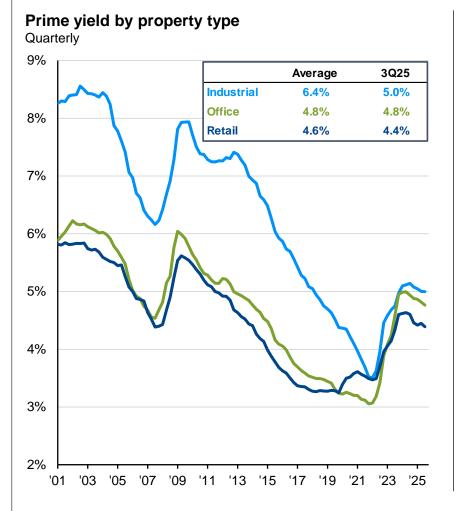
Source: RCA, J.P. Morgan Asset Management. (Right) *2025 data are as of 3Q25. Guide to Alternatives. Data are based on availability as of November 30, 2025.



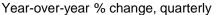


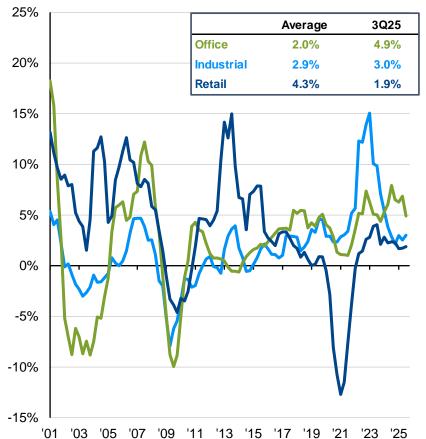
Europe real estate: Yield and income

GTA MI 27



Prime rent growth by property type





Source: CBRE ERIX, J.P. Morgan Asset Management.

Industrial is represented by industrial logistics. Retail is represented by high street retail. Prime yields are absolute and weighted by property value. (Left) Prime yield is the yield an investor receives from acquiring a fully let grade A building in a prime location, reflecting current market transaction levels. (Right) Prime rent is the highest open-market rent expected for a top-quality unit in a prime location at the survey date. Past performance is not a reliable indicator of current and future results.

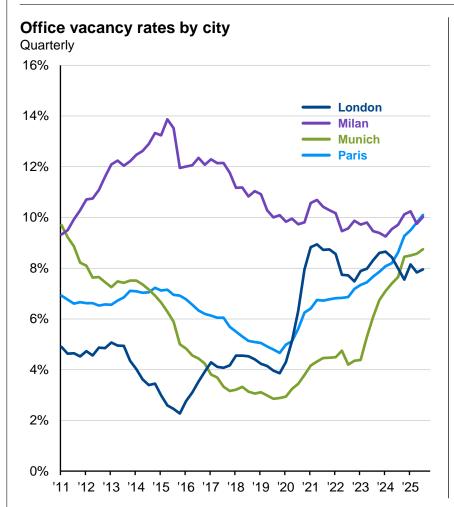
Guide to Alternatives. Data are based on availability as of November 30, 2025.

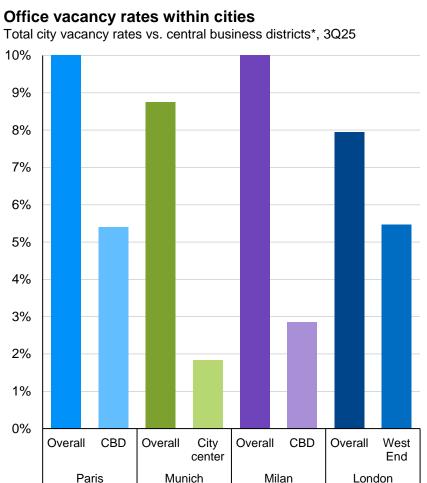
J.P.Morgan
ASSET MANAGEMENT



Europe real estate: Office vacancy rates

GTA MI 28





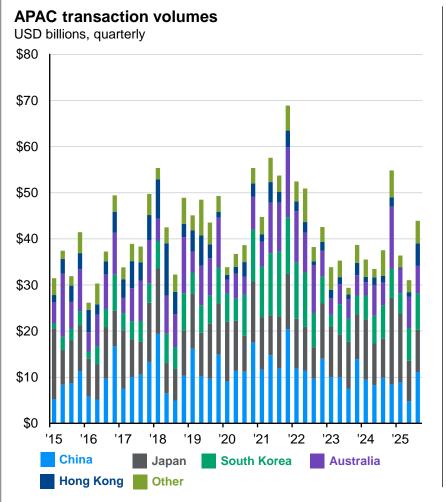
Source: CBRE ERIX, J.P. Morgan Asset Management. (Right) *Includes both central business districts (CBDs) and prime areas. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.

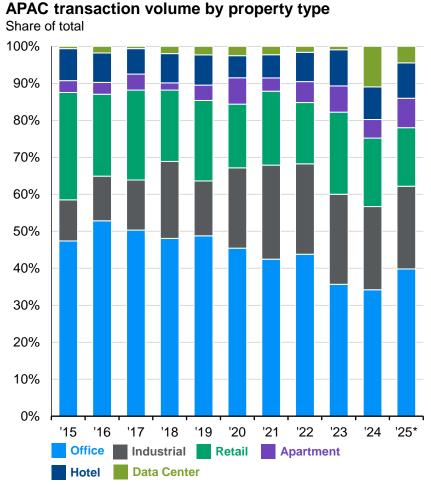




Asia Pacific real estate: Transaction volumes

GTA MI 29





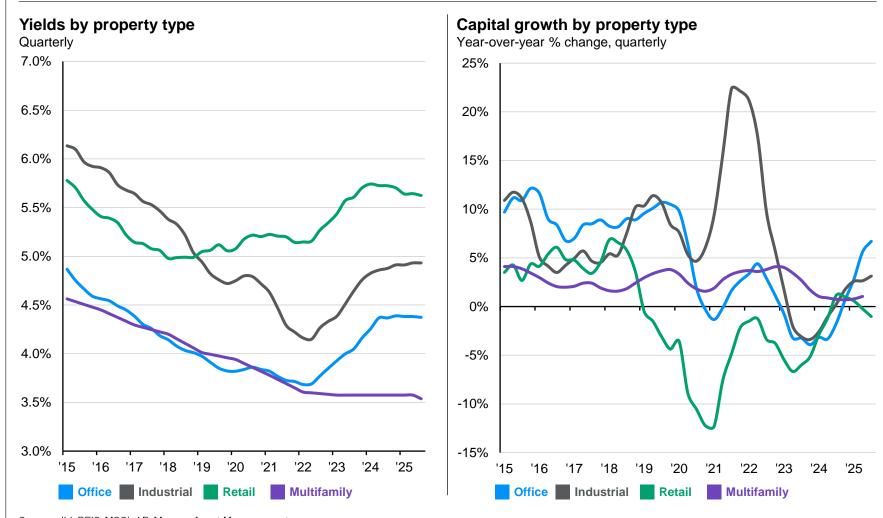
Source: RCA, J.P. Morgan Asset Management. (Left) Transaction volumes include office, industrial, retail, hotel, data center, residential (professional investor) properties and portfolios >= USD 10 million and excludes development sites. Figures are not frozen and subject to updates by RCA. (Right) *2025 data are as of 3Q25. Guide to Alternatives. Data are based on availability as of November 30, 2025.





Asia Pacific real estate: Yields and capital values

GTA MI 30



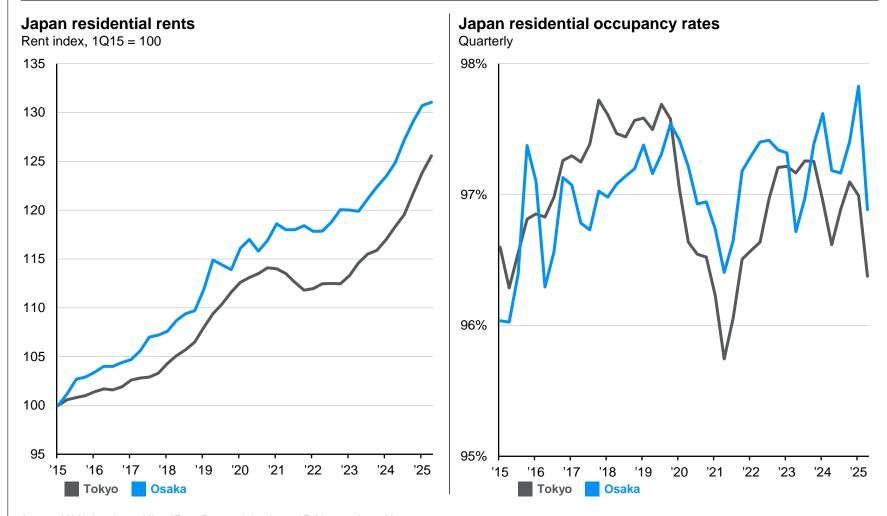
Source: JLL REIS, MSCI, J.P. Morgan Asset Management. (Left) All yield and capital growth data from JLL REIS, except multifamily sector which is from MSCI. Weight of each market based on country allocation % of ANREV ODCE Fund Index. Yields for office, industrial and retail sectors refer to market yields of overall APAC, while yields for multifamily refers to the value cap rate for Japan markets only. (Right) *Multifamily data available through 2Q25. Past performance is not a reliable indicator of current and future results.

J.P.Morgan



Asia Pacific real estate: Japan multifamily

GTA MI 31



Source: MSCI, Sumitomo Mitsui Trust Research Institute, J.P. Morgan Asset Management.

Data are as of 2Q25. (Left) Rent index based on rolling 2-quarter average index returns. (Right) Occupancy based on 3-month moving average level. Occupancy rates in recent periods are subject to regular changes when source data becomes available. Past performance is not a reliable indicator of current and future results.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



\$800

\$600

\$400

\$200

\$0

'27

'28

'29

'30

'31

'32

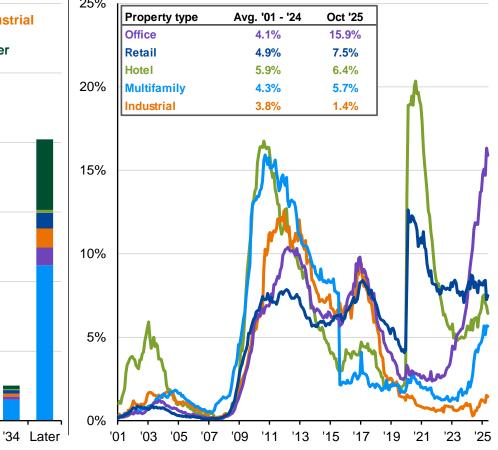


Commercial mortgage maturities and delinquencies

GTA MI 32



U.S. commercial mortgage delinquencies Delinquency rates by property type, monthly



Source: Moody's, Mortgage Bankers Association, J.P. Morgan Asset Management. (Left) Data are as of 12/31/2024. Other includes hospitals. (Right) Moody's defines delinquencies as loans that are 60 or more days in payment arrears, that are matured and performing, matured and nonperforming, foreclosure in progress or REO ("real estate owned" by a bank). Guide to Alternatives. Data are based on availability as of November 30, 2025.

'33

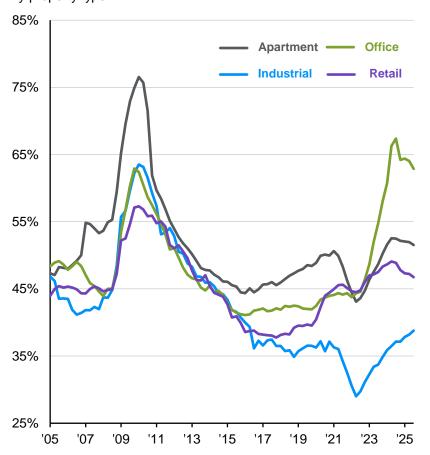




Commercial real estate credit risk metrics

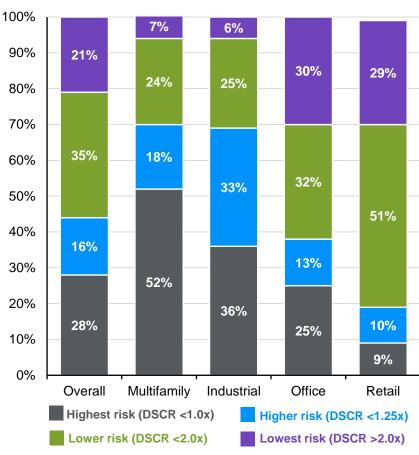
GTA MI 33

U.S. real estate loan-to-value (LTV) ratios By property type



Guide to Alternatives. Data are based on availability as of November 30, 2025.





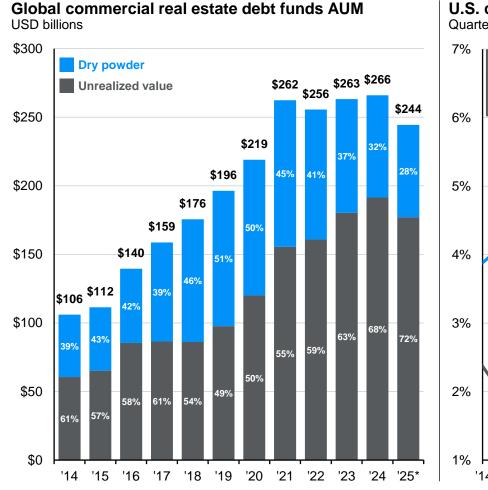
Source: NCREIF, Newmark Research, Trepp, J.P. Morgan Asset Management. (Left) A loan-to-value (LTV) ratio, specifically for leveraged properties, is the ratio of the loan amount to the appraised value of the property. This metric is used to assess the risk associated with a real estate investment, with a higher LTV indicating higher risk due to greater leverage. (Right) *CRE debt maturing before 2028. The debt service coverage ratio (DSCR) is calculated by dividing the Net operating income (NOI) of a property by its total debt service (the total amount of principal and interest payments due on the property's debt). A DSCR greater than 1 indicates that the property generates more income than is required to cover its debt obligations, while a DSCR less than 1 suggests that the property does not generate enough income to meet its debt payments.



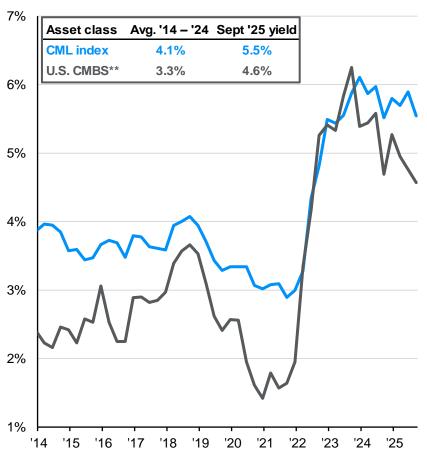


Commercial real estate debt

GTA MI 34



U.S. commercial mortgage yieldsQuarterly



Source: Bloomberg, Chatham Financial, FactSet, Gilberto-Levy, Preqin, J.P. Morgan Asset Management. (Left) 2025 data are as of 1Q25. (Right) The Commercial Mortgage Loan (CML) index is a weighted average aggregate of the quarterly fixed-rate yields provided by Chatham Financial for office, retail, multifamily and industrial properties in the 50%-65% loan-to-value (LTV) range. The sectors are weighted entirely by their share in the latest Gilberto-Levy Commercial Mortgage Index data. **U.S. CMBS: Bloomberg U.S. CMBS Investment Grade Index. Yields shown for U.S. CMBS are the yield to worst. Past performance is not a reliable indicator of current and future results. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.



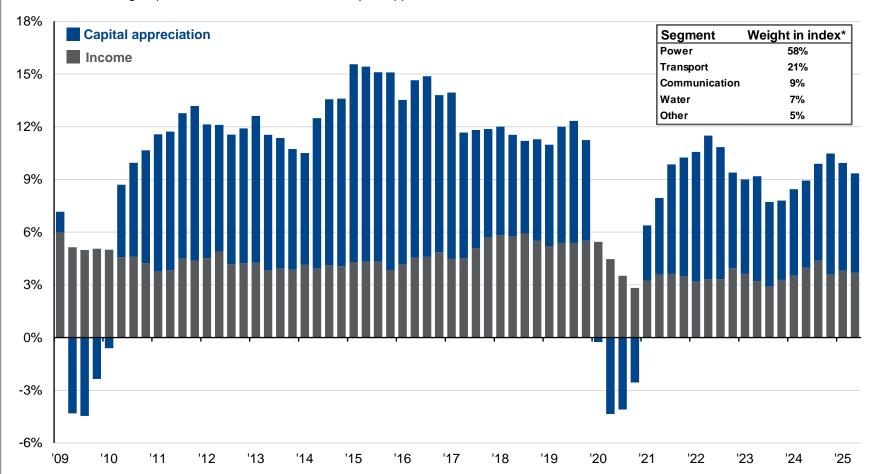


Sources of global infrastructure returns

GTA MI 35

Global infrastructure returns

1Q09 – 2Q25, rolling 4-quarter returns from income and capital appreciation



Source: MSCI, J.P. Morgan Asset Management.

Infrastructure returns represented by the MSCI Global Private Quarterly Infrastructure Asset Index. Data show rolling 4-quarter returns from income and capital appreciation. *Weights are based on enterprise value. Past performance is not a reliable indicator of current and future results.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



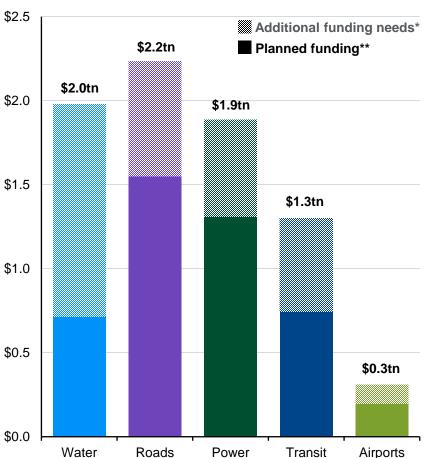


Infrastructure investment needs

GTA MI 36

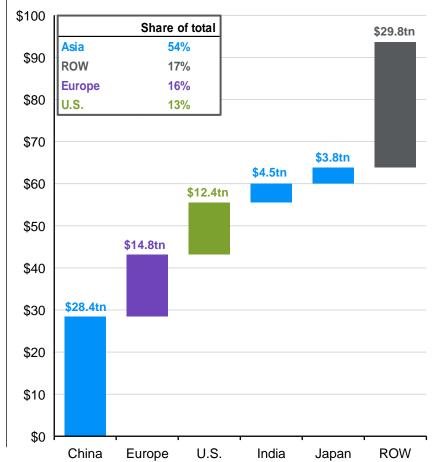


USD trillions, 2024 - 2033, as of 2024



Infrastructure investment needs by region

USD trillions, 2016 - 2040, constant 2016 prices



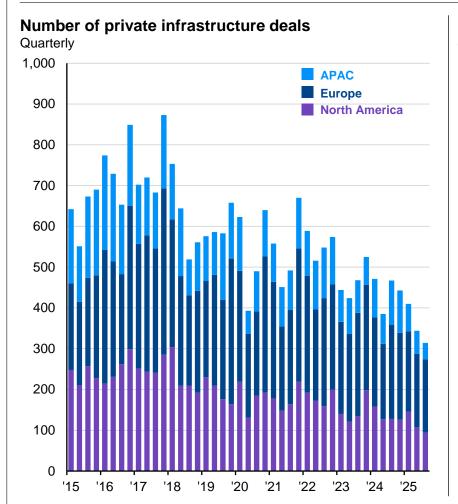
Source: American Society of Civil Engineers (ASCE), Global Infrastructure Hub by G20, J.P. Morgan Asset Management. (Left) Categories defined by the ASCE in the March 2025 "A Comprehensive Assessment of America's Infrastructure" report. *Additional funding is the amount of funding needed to get each category to a "B" rating, or a state of "Good" repair, as defined by the ASCE. **Planned public funding is the amount of investment from 2024 to 2033 that is currently in place by U.S. law. (Right) ROW = rest of world.

J.P.Morgan



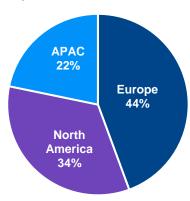
Global infrastructure transactions

GTA MI 37



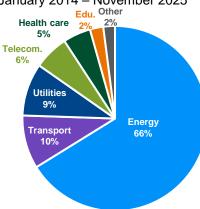
Deals by region

Share of deals, January 2014 – November 2025



Deals by type

Number of deals, January 2014 – November 2025



Source: Preqin, J.P. Morgan Asset Management. (Bottom right) Other includes waste management, government buildings, logistics and defense. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.



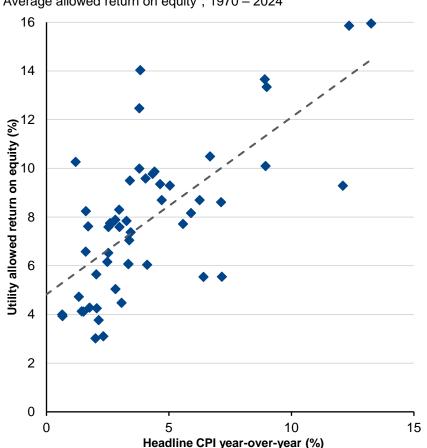


U.S. utility profitability and consumption

GTA MI 38

Gas and electric utilities: Allowed returns vs. inflation

Average allowed return on equity*, 1970 - 2024



Household utility spending

Household utility spending % of GDP



Source: AEU, Bloomberg, Bureau of Economic Analysis, SNL, J.P. Morgan Asset Management. (Left) Data represent average allowed return on equities (RoEs) for electricity and natural gas utilities and annual inflation from December 1970 through December of the indicated period. *Return on equity is lagged by 2 years. Past performance is not a reliable indicator of current and future results.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



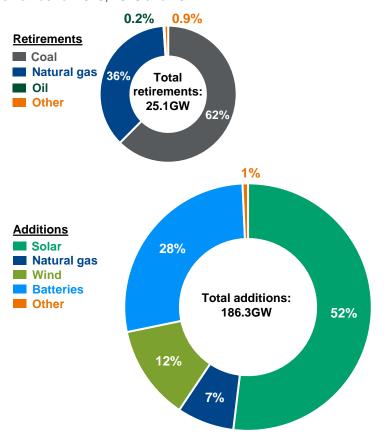


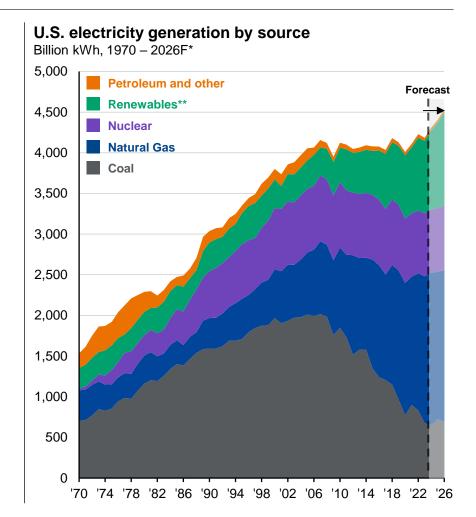
U.S. electricity generation

GTA MI 39

Planned U.S. electricity generating capacity

Remainder of 2025, 2026 and 2027





Source: EIA, J.P. Morgan Asset Management.

(Left) Data is from the EIA's "November 2025 Electric Power Monthly" report and uses net summer capacity to illustrate share of retirements and additions. Percentages may not sum to 100 due to rounding. (Right) Data is from the EIA's "November 2025 Monthly Energy Review" report. *Energy forecast figures are from EIA's "Short Term Energy Outlook." **Renewables include wind, solar, geothermal, biomass waste, biomass wood and hydroelectric.

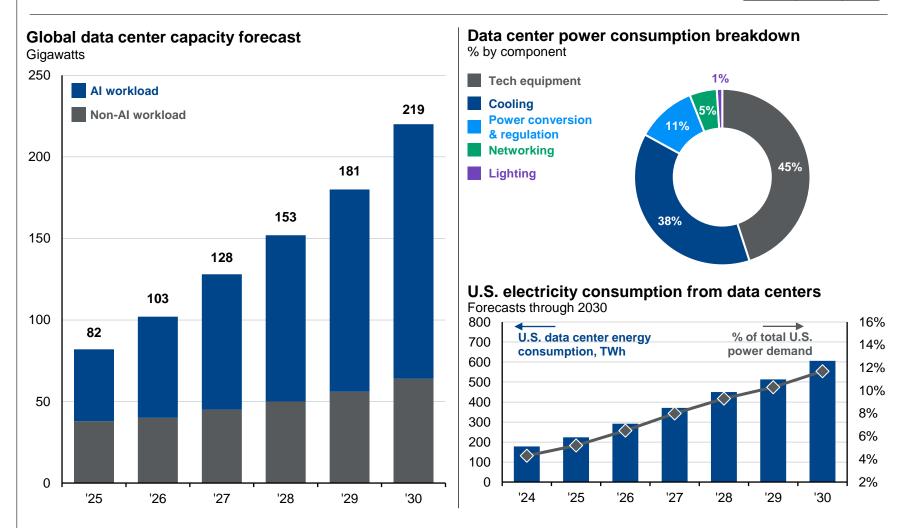
Guide to Alternatives. Data are based on availability as of November 30, 2025.





Data centers and electricity consumption

GTA MI 40



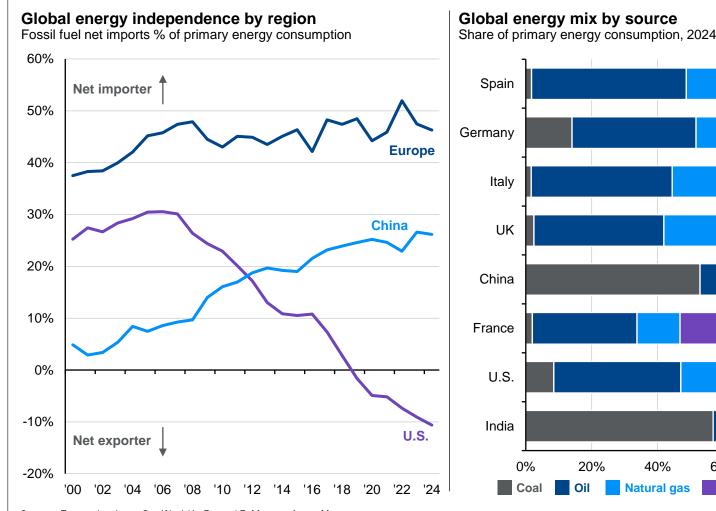
Source: IEEE Communications, McKinsey & Company, J.P. Morgan Asset Management. (Left and bottom right) Forecasts are from McKinsey & Company. (Top right) Data center component breakdown data are from Ahmed, Bollen and Alvarez, "A Review of Data Centers Energy Consumption and Reliability Modeling" (2021). Guide to Alternatives. Data are based on availability as of November 30, 2025.





Global energy trends

GTA MI 41



Source: Energy Institute, Our World in Data, J.P. Morgan Asset Management.

Data are from Energy Institute's "Statistical Review of World Energy 2025." (Left) Fossil fuels include oil, coal and natural gas, as aggregated by the Energy Institute. Analysis assumes zero oil exports for China. (Right) Data aggregated by Our World in Data. Renewables include hydro, wind, solar and biomass fuels.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



100%

80%

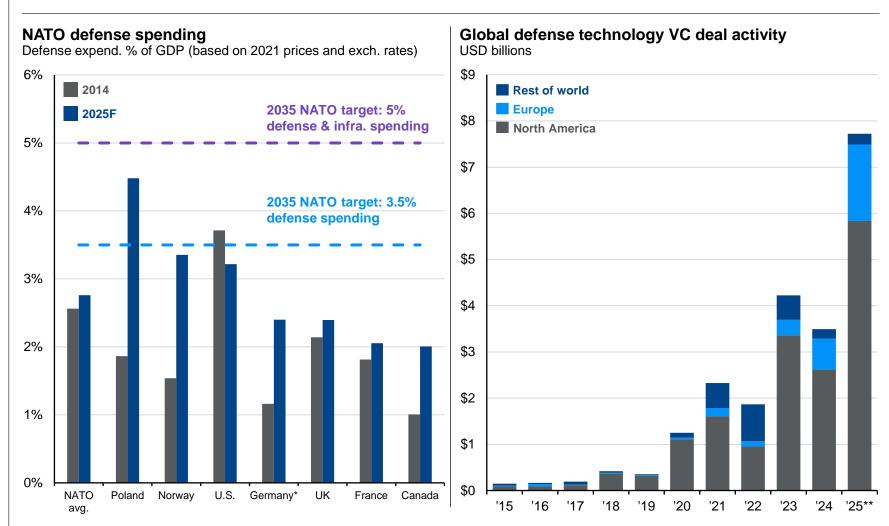
Nuclear Renewables

60%



Defense spending on infrastructure and innovation

GTA MI 42



Source: NATO, PitchBook Data, Inc, J.P. Morgan Asset Management. (Left) 2025 figures for all countries are estimated, except Germany. *Germany passed its budget in September 2025 that sets defense expenditures as a share of GDP at 2.4%. Data for all other countries listed are from NATO's June 2025 press release titled "Defence Expenditure of NATO Countries (2014-2025)." (Right) **2025 data are as of October 2025.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



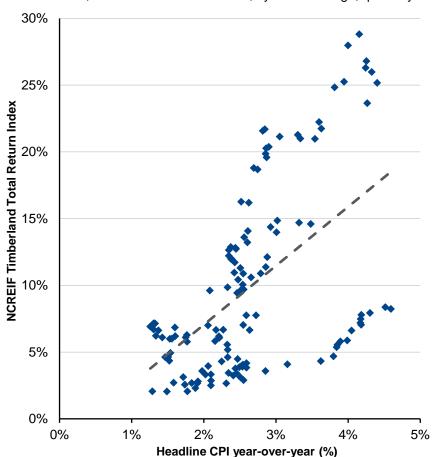


U.S. timberland investment returns

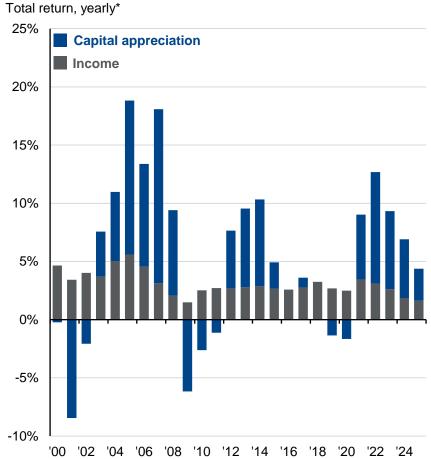
GTA MI 43



Headline CPI, NCREIF Timberland Index, 5yr. ann. change, quarterly



Sources of U.S. timberland returns



Source: BLS, FactSet, NCREIF, J.P. Morgan Asset Management.

(Left) Represents the time period from 1Q87 to 2Q25. (RHS) *2025 data are as of 3Q25. Past performance is not a reliable indicator of current and future results.

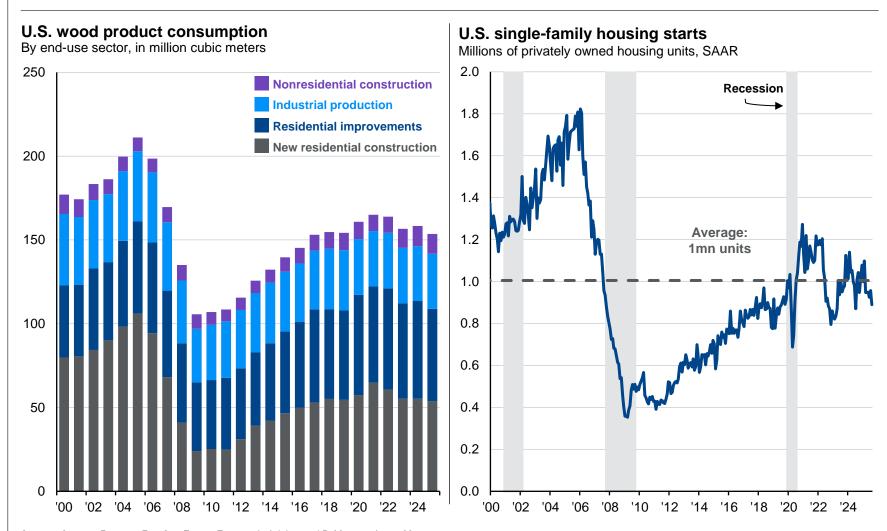
Guide to Alternatives. Data are based on availability as of November 30, 2025.





U.S. wood consumption and demand

GTA MI 44



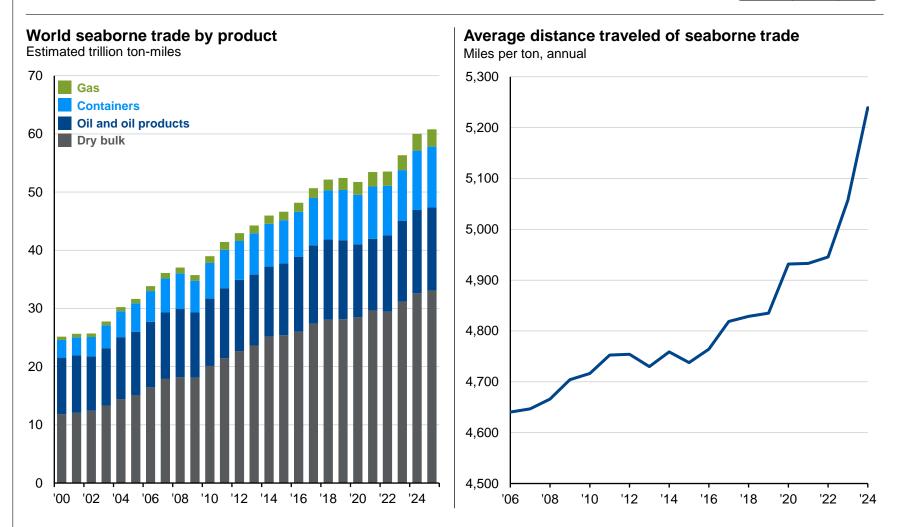
Source: Census Bureau, FactSet, Forest Economic Advisors, J.P. Morgan Asset Management. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.





Global seaborne trade volumes

GTA MI 45



Source: Clarksons Research, J.P. Morgan Asset Management. (Left) 2025 seaborne trade volumes are a forecast as of November 2025. Dry bulk refers to unpackaged commodity cargo. (Right) Average seaborne trade distance miles are an estimate derived by dividing ton-miles carried by vessels by the total volume of shipments in each period. *Guide to Alternatives.* Data are based on availability as of November 30, 2025.



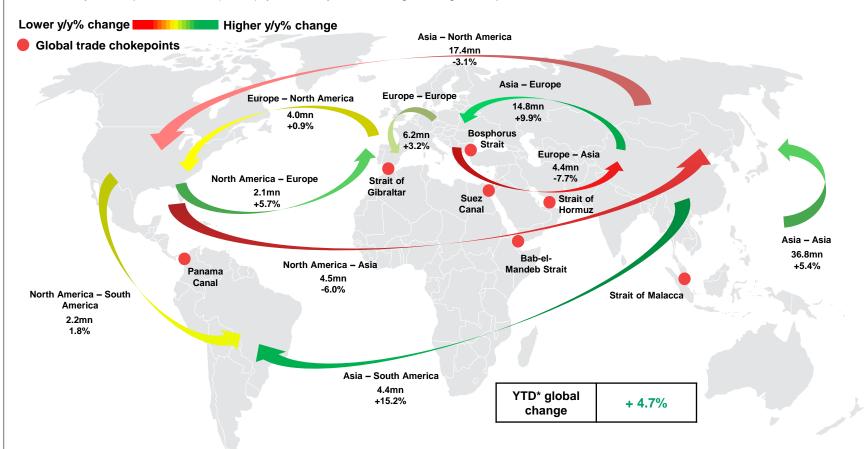


Global trade routes and chokepoints

GTA MI 46

Global containership trade volumes

YTD* twenty-foot equivalent units (TEUs), year-over-year % change during same period



Source: Bloomberg, Container Trade Statistics, J.P. Morgan Asset Management.

*YTD 2025 data are as of 9/30/2025. Twenty-foot equivalent unit (TEU) is a standard unit of measurement for container shipping volumes. A modern standard 40-foot container is equivalent to 2 TEUs. Trade chokepoints are strategic maritime passageways that connect major ports or regions that can be vulnerable to geopolitical conflict or disruption.

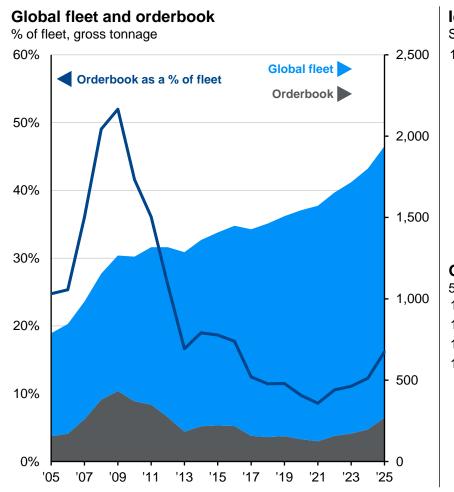
Guide to Alternatives. Data are based on availability as of November 30, 2025.

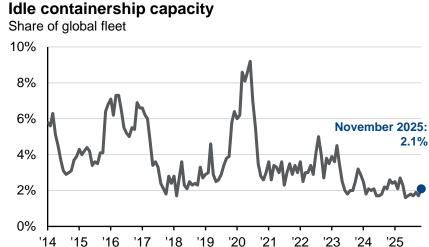


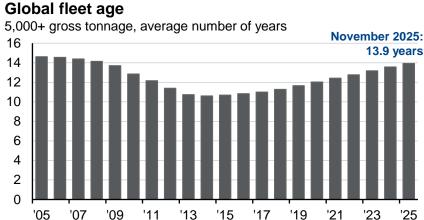


Global shipping: Orders, capacity and age

GTA MI 47







Source: Clarksons Research, MSI, Sea/net, J.P. Morgan Asset Management. (Left) An orderbook contains all the vessels that have been delivered as well as the current order or expected ship orders. The orderbook to fleet ratio is a useful indicator of future supply growth. (Bottom right) Gross tonnage is the volume of a ship's enclosed spaces in cubic meters. Guide to Alternatives. Data are based on availability as of November 30, 2025.



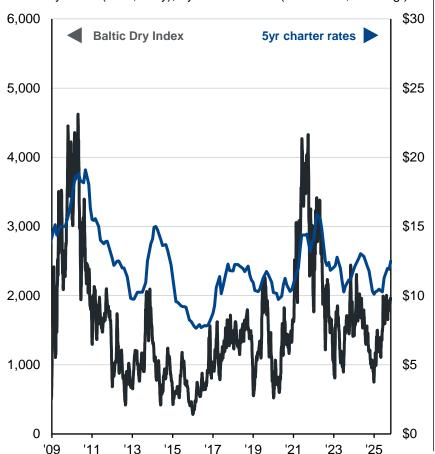


Global shipping costs and U.S. imports

GTA MI 48

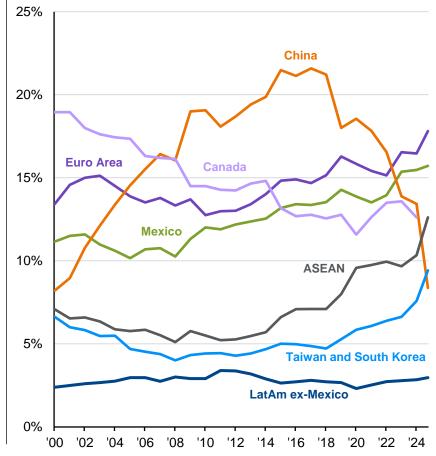
Global shipping costs

Baltic Dry Index (level, daily), 5yr charter rates (USD thou., mo. avg.)



U.S. goods imports by country

Share of total U.S. goods imports, annual and 2025 YTD*



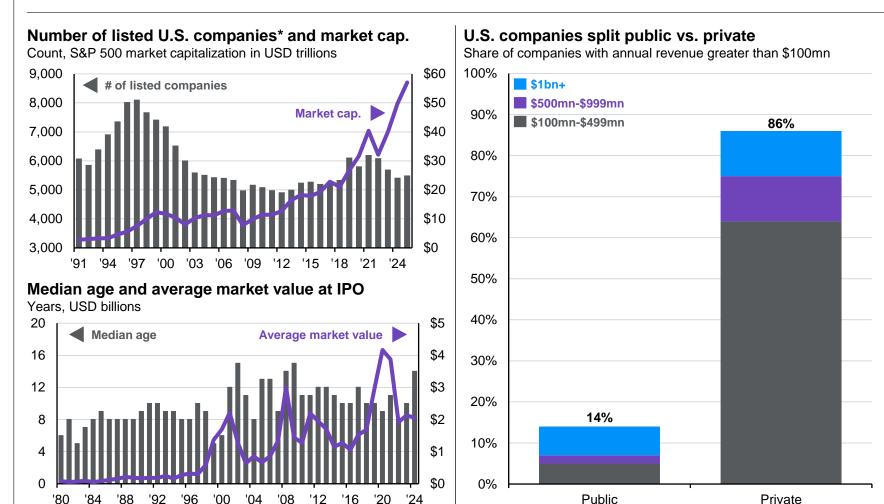
Source: Bloomberg, Clarksons Research, FactSet, U.S. Census Bureau, J.P. Morgan Asset Management. (Left) Charter rates shown are the monthly average leasing rate per day for Panamax bulk carrier ships carrying 75,000 deadweight tonnage (DWT) in the Atlantic and Pacific regions under a leasing agreement with a fixed duration of five years. (Right) *2025 YTD data are as of 7/31/2025. ASEAN includes Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. LatAm ex-Mexico includes Argentina, Brazil, Chile, Colombia and Peru. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.





U.S. public vs. private equity

GTA MI 49



Source: Bain and Company, FactSet, Jay Ritter – University of Florida, S&P Capital IQ, World Federation of Exchanges, J.P. Morgan Asset Management. (Top left) *Number of listed U.S. companies is represented by the sum of the number of companies listed on the NYSE and the NASDAQ. (Bottom left) Average market value is calculated by dividing the total market value at first closing price by the total number of IPOs for each period. The sample is IPOs with an offer price of at least \$5, excluding ADRs, unit offers, closed-end funds, REITs, natural resource limited partnerships, small best efforts offers, banks and S&Ls and stocks not listed on CRSP (CRSP includes Amex, NYSE and NASDAQ stocks). Guide to Alternatives. Data are based on availability as of November 30, 2025.



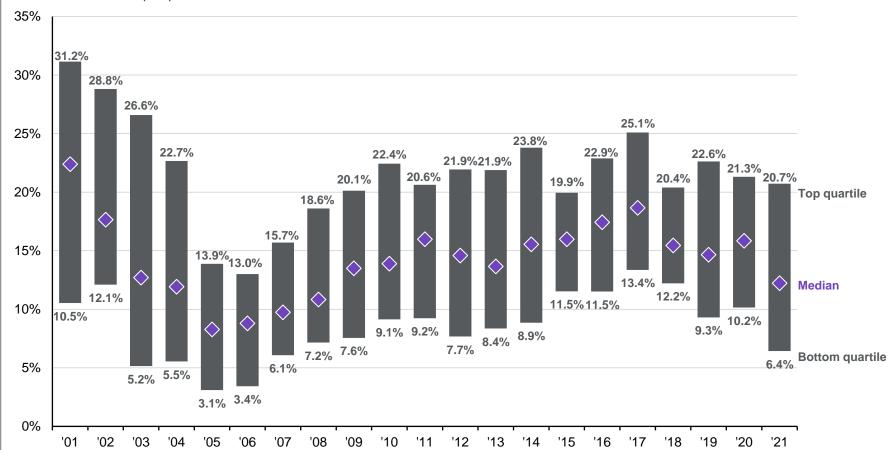


Global private equity returns

GTA MI 50

Global private equity return dispersion by vintage year

Internal rate of return (IRR)



Source: Burgiss, J.P. Morgan Asset Management.

Global private equity is represented by global buyout funds. IRR performance data are as of 2Q25. Past performance is not a reliable indicator of current and future results.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



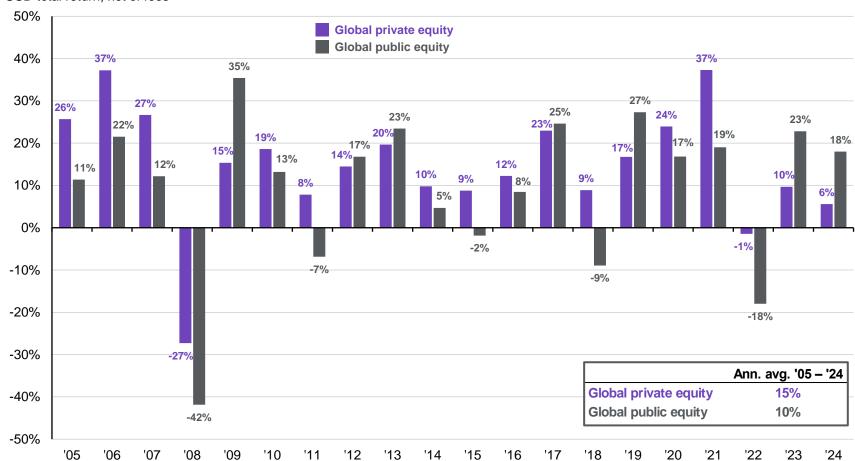


Private equity performance vs. public markets

GTA MI 51

Annual global private and public equity performance

USD total return, net of fees



Source: Burgiss, FactSet, MSCI, J.P. Morgan Asset Management.
Private equity returns are time-weighted. Global private equity: MSCI Global Buyout Closed-End Fund Index. Global public equity: MSCI All Country World Total Return Index. Past performance is not a reliable indicator of current and future results.

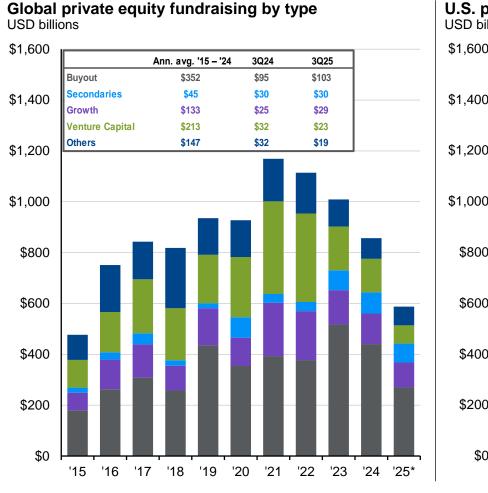
Guide to Alternatives. Data are based on availability as of November 30, 2025.

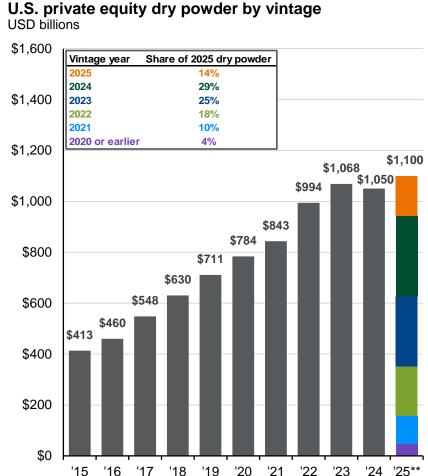




Private equity fundraising and dry powder

GTA MI 52





Source: PitchBook Data, Inc, Preqin, J.P. Morgan Asset Management. (Left) *2025 data are as of 3Q25. Buyout funds: Acquire all or a significant amount of equity in their target company, often financed by a high proportion of debt; Growth equity funds: Take minority stakes in companies, financed by all-equity deal structures; Secondary funds: Purchase existing stakes in private equity funds from other limited partners (LPs); Venture capital funds: Invest in early-stage companies with high growth potential; Others: Includes funds raised for restructuring or turnaround deals that use a combination of debt and equity financing. (Right) **2025 data are as of 1Q25. Percentages may not sum to 100 due to rounding. Guide to Alternatives. Data are based on availability as of November 30, 2025.

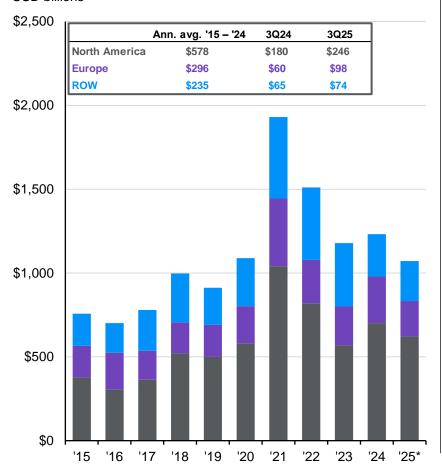
J.P.Morgan



Global private equity investments and exits

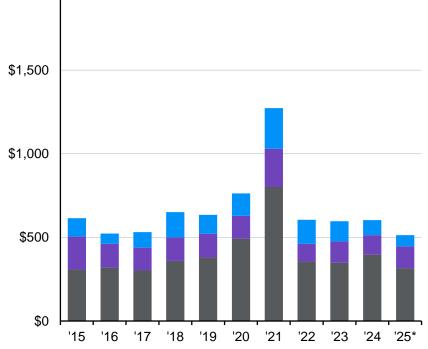
GTA MI 53

Global private equity investments by value USD billions



Global private equity exits by value USD billions

\$2,500				
Ψ=,σσσ		Ann. avg. '15 - '24	3Q24	3Q25
	North America	\$406	\$90	\$76
	Europe	\$148	\$23	\$63
	ROW	\$126	\$27	\$23
\$2,000				



Source: Preqin, J.P. Morgan Asset Management. *2025 data are as of 3Q25.

Guide to Alternatives. Data are based on availability as of November 30, 2025.

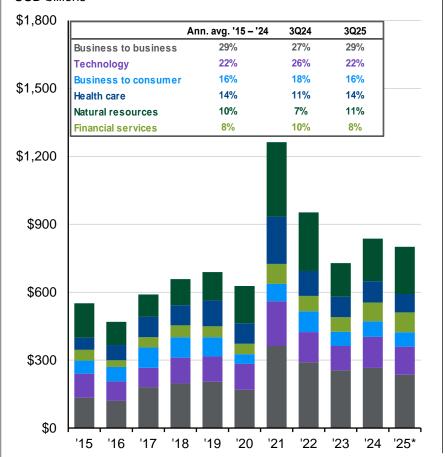




U.S. private equity investments and exits

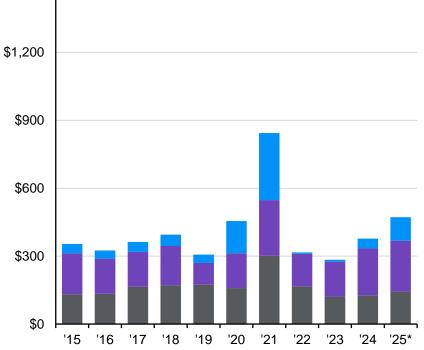
GTA MI 54

U.S. private equity investments by sector USD billions



U.S. private equity exits by type USD billions

00		Ann. avg. '15 - '24	3Q24	3Q25
	Secondary buyout	42%	41%	42%
	Corporate acquisition	43%	51%	39%
)	Public listing	14%	8%	19%



Source: PitchBook Data, Inc, J.P. Morgan Asset Management.
*2025 data are as of 3Q25. Percentages may not sum to 100 due to rounding. (Left) Natural resources = Materials & resources and energy.

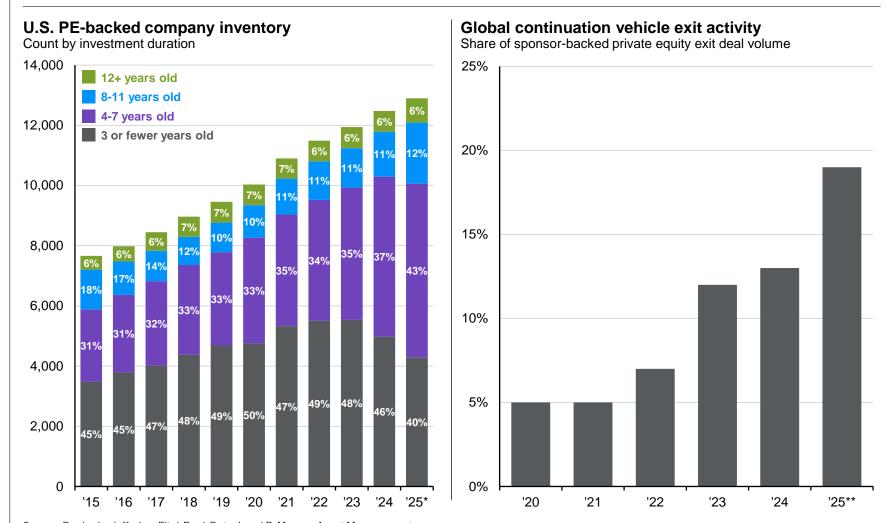
Guide to Alternatives. Data are based on availability as of November 30, 2025.





Private equity inventory and continuation vehicles

GTA MI 55



Source: Dealogic, Jefferies, PitchBook Data, Inc, J.P. Morgan Asset Management. (Left) *2025 data are as of 3Q25. Percentages may not sum to 100 due to rounding. (Right) **2025 data are as of 2Q25. Sponsor-backed exit deal volume estimates are from Dealogic and include M&A and IPO proceeds. Percentage represents continuation vehicle transaction volume divided by sponsor-backed exit deal volume.

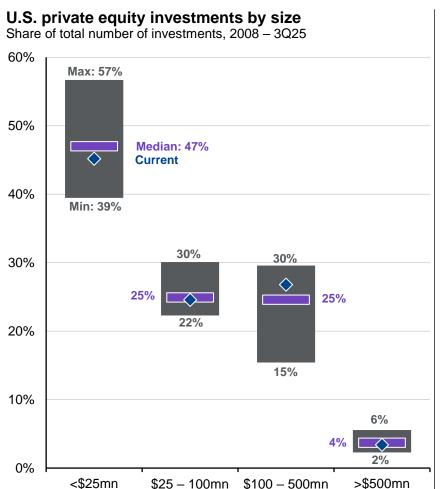
Guide to Alternatives. Data are based on availability as of November 30, 2025.

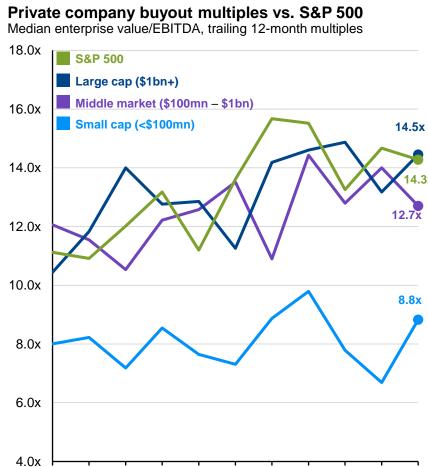
J.P.Morgan



U.S. private equity investments and multiples by size

GTA MI 56





'15

'14

'16

'17

'18

'19

'20

'21

Source: PitchBook Data, Inc, J.P. Morgan Asset Management. Guide to Alternatives. Data are based on availability as of November 30, 2025.



'23

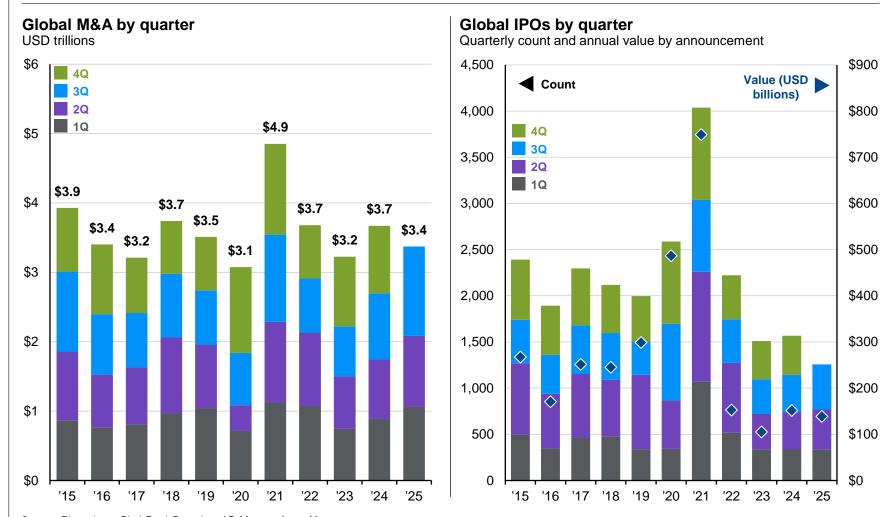
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Global M&A and IPOs

GTA MI 57



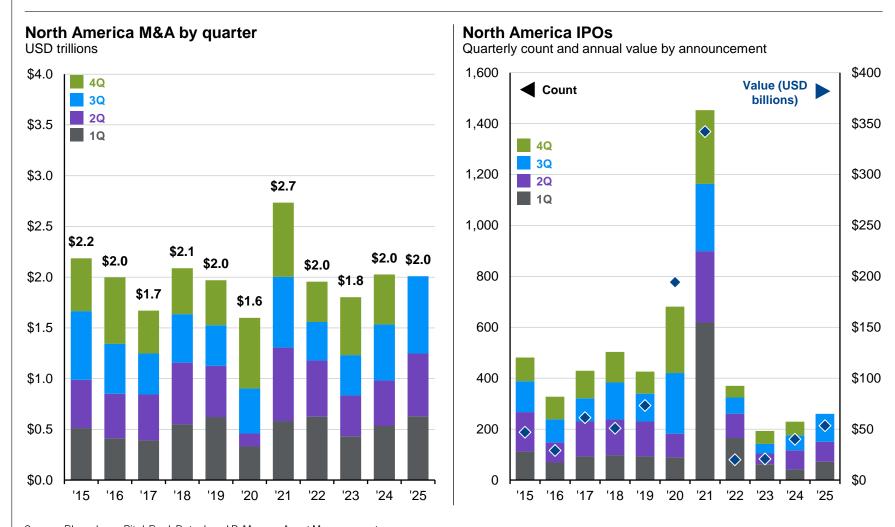
Source: Bloomberg, PitchBook Data, Inc, J.P. Morgan Asset Management. 2025 data are as of the latest quarter shown. (Right) Initial Public Offerings data are provided by Bloomberg and are tracked through public announcements or disclosed directly via the deal's lead underwriters. Guide to Alternatives. Data are based on availability as of November 30, 2025.





North America M&A and IPOs

GTA MI 58



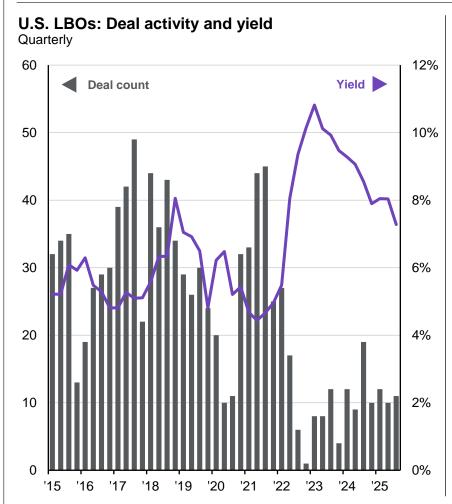
Source: Bloomberg, PitchBook Data, Inc, J.P. Morgan Asset Management. 2025 data are as of the latest quarter shown. (Right) Initial public offerings data are provided by Bloomberg and are tracked through public announcements or disclosed directly via the deal's lead underwriters. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.

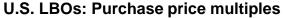




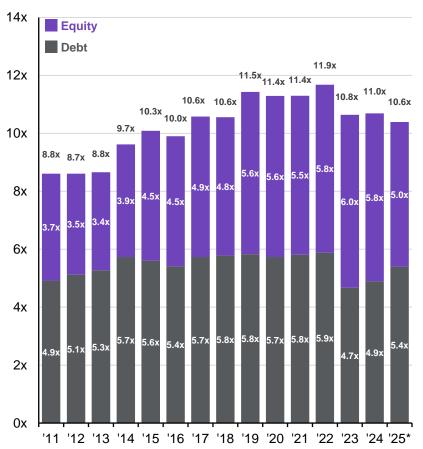
U.S. leveraged buyouts

GTA MI 59





Equity and debt over trailing EBITDA



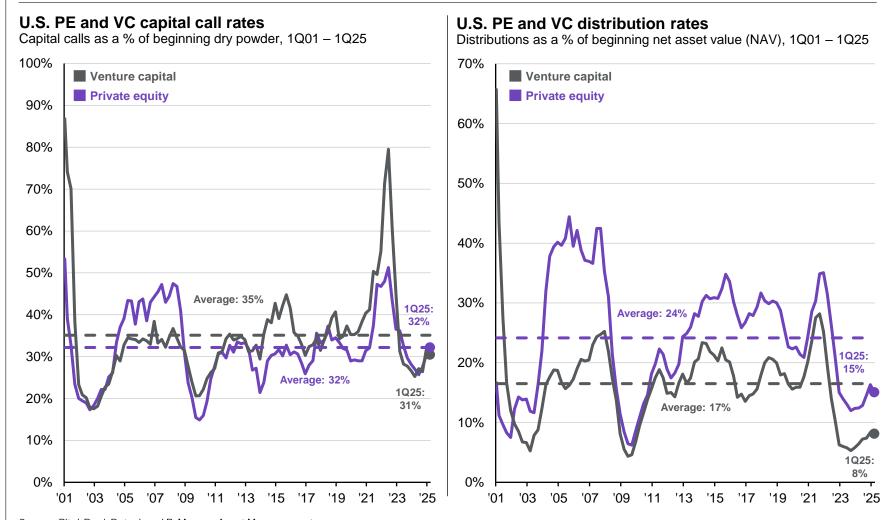
Source: PitchBook Data, Inc, J.P. Morgan Asset Management. (Left) Yield represents the average new-issue yield on broadly syndicated loans. (Right) *2025 data are as of 3Q25. Past performance is not a reliable indicator of current and future results. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.





Capital calls and distributions

GTA MI 60



Source: PitchBook Data, Inc, J.P. Morgan Asset Management.
Latest quarter data are preliminary. Capital call and distribution rates are calculated on a rolling 12-month basis. (Left) The capital call rate is the rate at which funds ask their investors to provide a portion of funds that they committed. (Right) The distribution rate is the rate at which investors are paid after fund managers realize their investments in underlying companies or assets, providing returns on the capital invested.

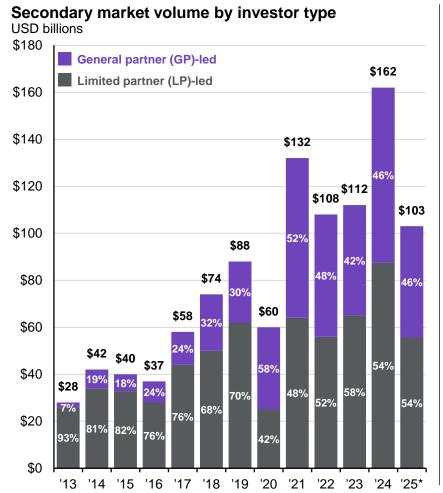
Guide to Alternatives. Data are based on availability as of November 30, 2025.

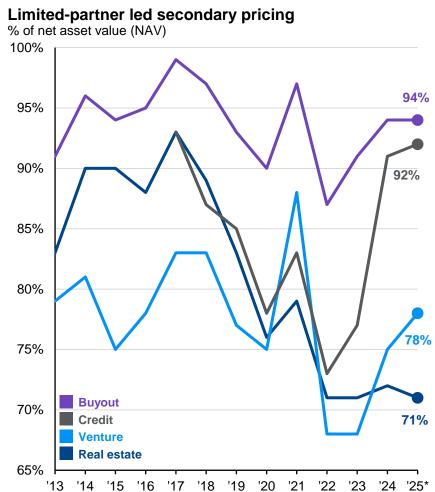




Global private secondary market

GTA MI 61





Source: Greenhill, Jefferies, J.P. Morgan Asset Management.
*2025 data are as of 2Q25. "Global Secondary Market Review," Jefferies, July 2025. Secondary transactions involve selling an existing stake of a target company or fund to raise liquidity, exit a position, modify exposures or lock in gains.

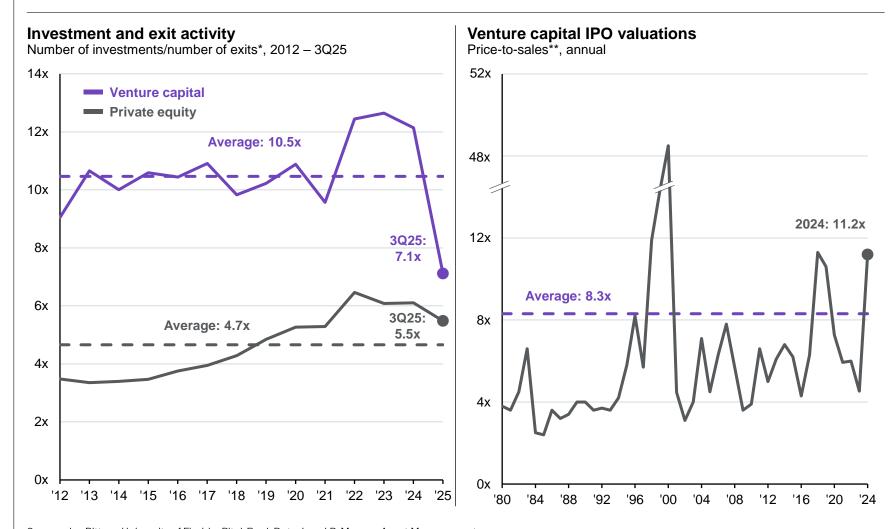
Guide to Alternatives. Data are based on availability as of November 30, 2025.





U.S. venture capital

GTA MI 62



Source: Jay Ritter – University of Florida, PitchBook Data, Inc, J.P. Morgan Asset Management. (Left) *Number of investments is defined as deal count. (Right) **Price is defined as the first closing market price. Sales are defined as the last 12 months' revenues as reported in the prospectus.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



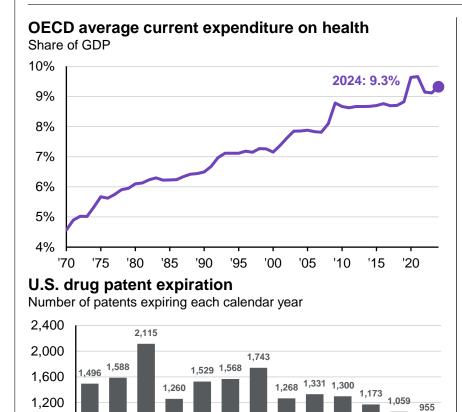
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Health care dynamics

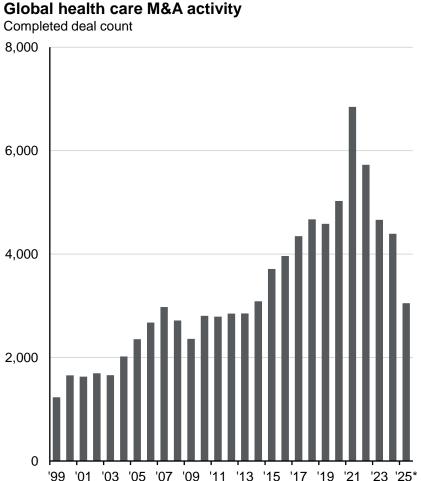
GTA MI 63



'30

'28

'29



Source: Bloomberg, FDA, OECD, J.P Morgan Asset Management. (Bottom left) Total patents expiring are from the FDA's Orange Book and Purple Book. (Right) *2025 data are as of 3Q25. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.

'35

'31 '32 '33



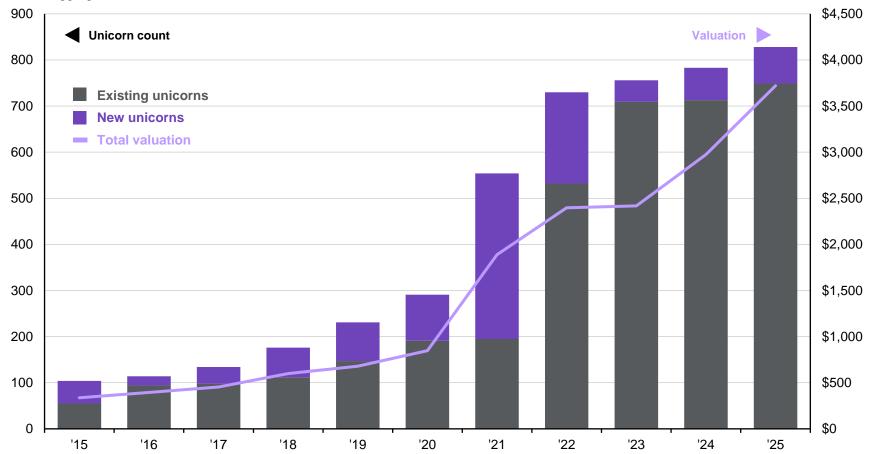


U.S. unicorns: Formations and valuations

GTA MI 64

Count and valuation of U.S. unicorns (venture capital-backed companies valued more than \$1bn)

Count, aggregate USD billions



Source: PitchBook Data, Inc, J.P. Morgan Asset Management.
Classification categories are from PitchBook. A unicorn is defined by PitchBook as a venture capital-backed company with a post-money valuation of over \$1 billion. Companies that have gone public, been acquired by another company or had their valuation fall below \$1 billion are no longer counted as a unicorn. Past performance is not a reliable indicator of current and future results.

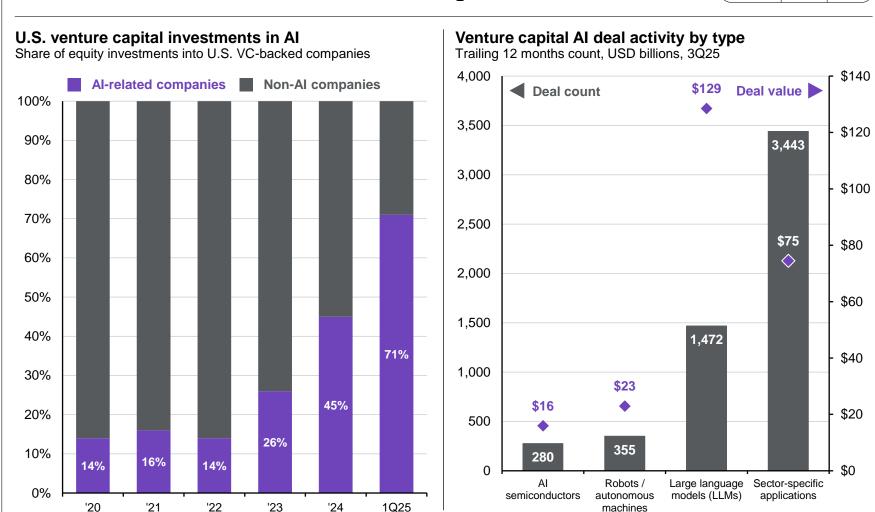
Guide to Alternatives. Data are based on availability as of November 30, 2025.

J.P.Morgan



Venture investment in artificial intelligence

GTA MI 65



Source: Crunchbase, EY, PitchBook Data, Inc, J.P. Morgan Asset Management. (Left) 1Q25 results were impacted by one significant deal totaling \$40 billion. (Right) Sector-specific applications are built on top of Al models and enable domain-specific performance and integration.

Guide to Alternatives. Data are based on availability as of November 30, 2025.



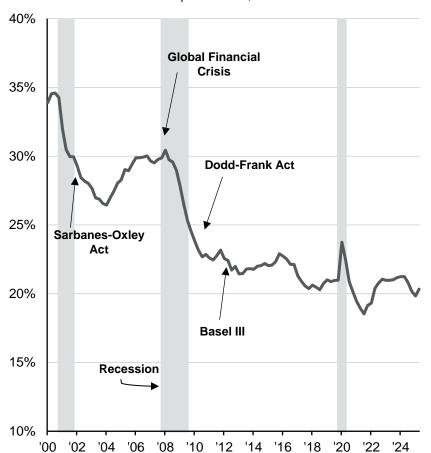


Private credit industry growth

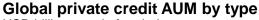
GTA MI 66



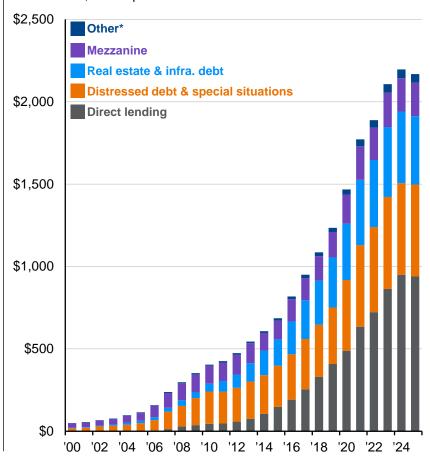
Share of total nonfinancial corporate debt, 1Q00 – 2Q25



Source: Federal Reserve, Preqin, J.P. Morgan Asset Management. (Right) 2025 data are as of 1Q25. *Other includes venture debt and fund of funds. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.



USD billions, end of period



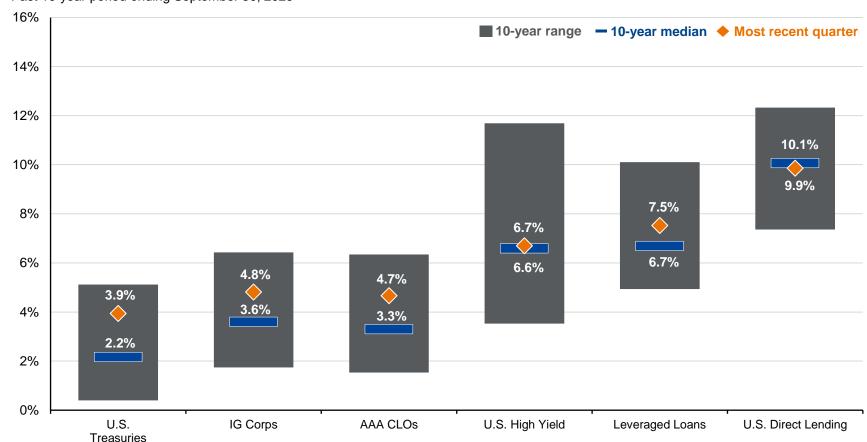


Credit yields comparison

GTA MI 67

Yields across public and private debt instruments

Past 10-year period ending September 30, 2025



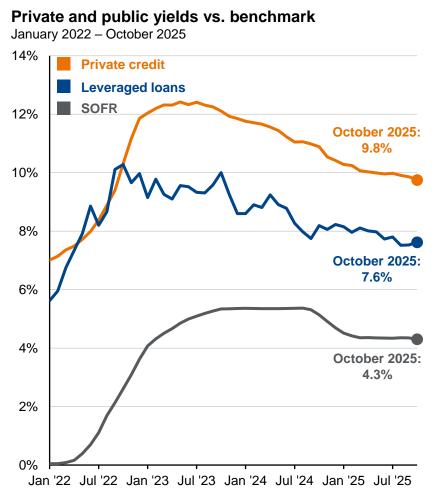
Source: Bloomberg, Cliffwater, FactSet, J.P. Morgan Credit Research, KBRA DLD, J.P. Morgan Asset Management. The yields of all categories are evaluated for the 10-year period indicated. U.S. Treasuries, IG corporates and U.S. High Yield categories use the yield to worst of their respective Bloomberg indices. AAA CLOs use the quarterly yield to worst of AAA-rated debt tranches as tracked by the J.P. Morgan Collateralized Loan Obligation Index (CLOIE). Leveraged Loans are represented by the yield to maturity from the J.P. Morgan Leveraged Loan Index Direct lending uses the annualized quarterly income return from the Cliffwater Direct Lending Index from the start of the period to 12/31/2021, and the quarterly yield to maturity from the KBRA DLD Index thereafter. Past performance is not a reliable indicator of current and future results.





Yield and spread trends

GTA MI 68



Private credit yield spreads to other debt instruments Difference in basis points (bps), January 2022 - October 2025 1,000 Private credit vs. SOFR Private credit vs. leveraged loans 800 October 2025: 545 bps 600 400 200 October 2025: 213 bps 0

Jan '22 Jul '22 Jan '23 Jul '23 Jan '24 Jul '24 Jan '25 Jul '25

Source: FactSet, Federal Reserve Bank of New York, J.P. Morgan Credit Research, KBRA DLD, J.P. Morgan Asset Management. SOFR: 90-day average Secured Overnight Financing Rate. Leveraged loans: yield-to-maturity from the J.P. Morgan Leveraged Loan Index. Private credit: yield-to-maturity from the KBRA DLD Index. (Right) The spreads are calculated by subtracting the monthly yield of the respective instrument from the monthly direct lending yield. Spreads and yields may not sum due to rounding. Past performance is not a reliable indicator of current and future results.

-200

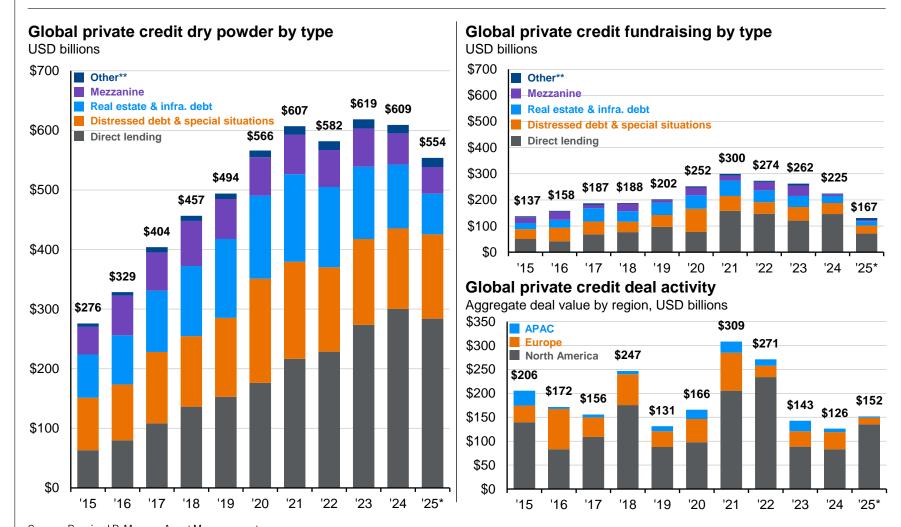
Guide to Alternatives. Data are based on availability as of November 30, 2025.





Private credit dry powder, fundraising and deal activity

GTA MI 69



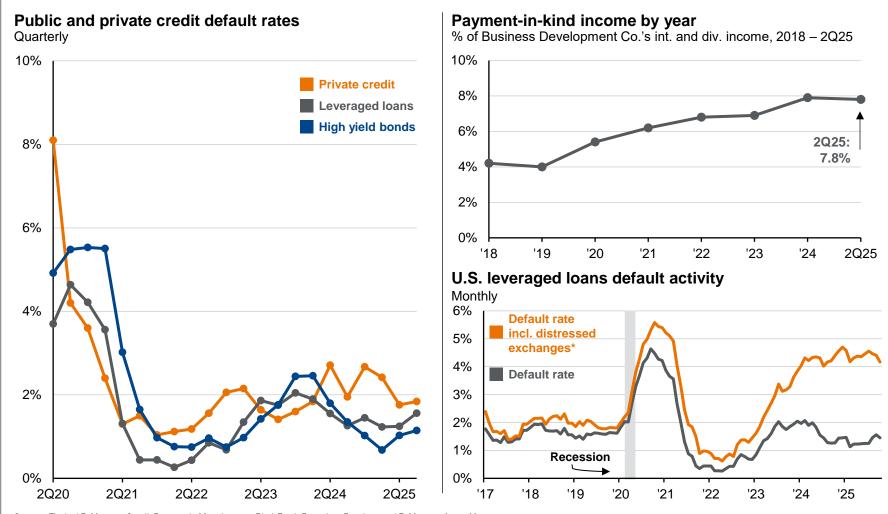
Source: Preqin, J.P. Morgan Asset Management. *2025 data are as of 3Q25. (Left and top right) **Other includes venture debt and fund of funds. *Guide to Alternatives*. Data are based on availability as of November 30, 2025.





Defaults and restructuring trends

GTA MI 70



Source: Fitch, J.P. Morgan Credit Research, Morningstar, PitchBook Data, Inc, Proskauer, J.P. Morgan Asset Management.
All leveraged loans data are from the Morningstar LSTA U.S. Leveraged Loan Index. (Left) Both the leveraged loan and high yield bond default rates are calculated using the LTM number of defaults as a % of total issuers. The private credit default rate is calculated by dividing the number of defaulted loans by the aggregate number of loans in the Proskauer Private Credit Default Index. (Top right) Payment-in-kind (PIK) is a borrowing arrangement under which a borrower can make interest payments in non-cash forms. Data is an average of Fitch-rated Business Development Companies (BDCs). (Bottom right) *A distressed exchange is defined as an offer to a creditor of new or restructured debt by a company that amounts to a diminished financial obligation relative to the original obligation. The standard default rate is calculated using the LTM number of defaults as a % of total issuers. The default rate including distressed exchanges is calculated using the LTM number of defaults plus distressed exchanges as a % of total issuers.

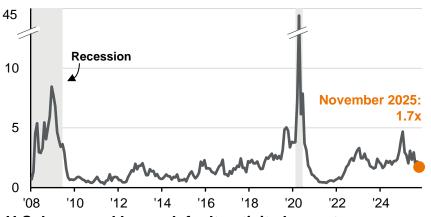
J.P.Morgan



Leveraged loans market trends

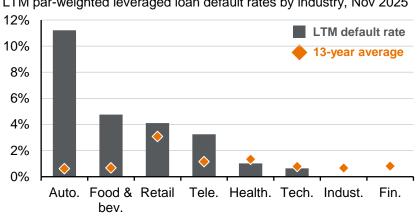
GTA MI 71

U.S. leveraged loans downgrade/upgrade ratio Rolling 3-month period



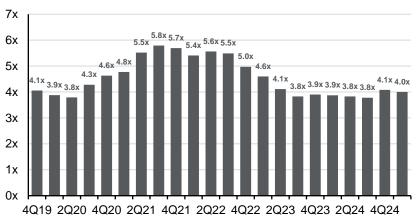
U.S. leveraged loans default activity by sector

LTM par-weighted leveraged loan default rates by industry, Nov 2025

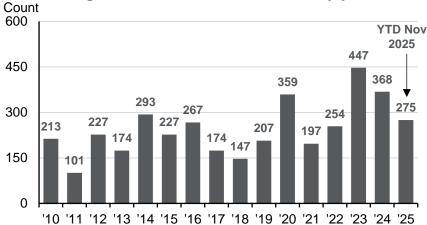


U.S. leveraged loans interest rate coverage

Weighted average*, EBITDA/interest expense, 4Q19 – 1Q25



U.S. leveraged loans amend and extends by year



Source: Bloomberg, J.P. Morgan Credit Research, PitchBook Data, Inc, J.P. Morgan Asset Management. (Top right) *Averages are weighted by outstanding loan amount. (Bottom left) Default rates do not include distressed exchanges. Data for each sector's 13-year average default rate are as of December 2024. Guide to Alternatives. Data are based on availability as of November 30, 2025.





Public and private credit returns

GTA MI 72

											2015 -	- 2024
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2Q25	Ann.	Vol.*
Mezzanine Debt	High Yield	Mezzanine Debt	Mezzanine Debt	Mezzanine Debt	Investment Grade	Distressed Debt	Mezzanine Debt	High Yield	Direct Lending	Mezzanine Debt	Mezzanine Debt	High Yield
16.0%	17.1%	14.0%	9.2%	14.6%	9.9%	22.4%	7.3%	13.4%	11.3%	5.7%	11.4%	8.6%
Direct Lending	Direct Lending	Distressed Debt	Direct Lending	Investment Grade	High Yield	Mezzanine Debt	Direct Lending	Leveraged Loans	Mezzanine Debt	CML - Retail	Direct Lending	Investment Grade
5.5%	11.2%	11.4%	8.1%	14.5%	7.1%	18.0%	6.3%	13.2%	11.1%	5.3%	9.0%	7.4%
CML - Office	Leveraged Loans	Direct Lending	CML - Industrial	High Yield	CML - Industrial	Direct Lending	Distressed Debt	Direct Lending	Leveraged Loans	CML - Senior	Distressed Debt	Leveraged Loans
3.2%	9.8%	8.6%	3.7%	14.3%	6.6%	12.8%	4.6%	12.1%	9.3%	5.2%	7.2%	6.3%
CML - Retail	Distressed Debt	High Yield	Distressed Debt	Direct Lending	CML - Apartment	Leveraged Loans	Leveraged Loans	Mezzanine Debt	Distressed Debt	CML - Apartment	Leveraged Loans	Distressed Debt
3.0%	8.5%	7.5%	3.5%	9.0%	6.5%	5.5%	0.1%	11.4%	8.4%	5.2%	5.5%	5.2%
CML - Industrial	Mezzanine Debt	Investment Grade	CML - Senior	Leveraged Loans	CML - Senior	High Yield	CML - Retail	Distressed Debt	High Yield	CML - Industrial	High Yield	CML - Apartment
2.9%	8.0%	6.4%	2.6%	8.6%	6.3%	5.3%	-7.6%	10.4%	8.2%	5.1%	5.2%	4.5%
CML - Senior	Investment Grade	CML - Apartment	CML - Apartment	CML - Apartment	CML - Office	CML - Apartment	CML - Office	Investment Grade	CML - Retail	CML - Office	CML - Retail	CML - Senior
2.7%	6.1%	6.3%	2.6%	8.3%	6.3%	2.0%	-7.6%	8.5%	5.8%	5.0%	3.3%	4.1%
CML - Apartment	CML - Retail	CML - Senior	CML - Retail	CML - Senior	CML - Retail	CML - Senior	CML - Senior	CML - Retail	CML - Apartment	High Yield	CML - Senior	CML - Industrial
1.6%	3.4%	5.7%	2.4%	8.1%	6.1%	1.9%	-9.0%	6.2%	5.2%	4.6%	3.1%	4.1%
Distressed Debt	CML - Senior	CML - Office	CML - Office	CML - Retail	Direct Lending	CML - Retail	CML - Industrial	CML - Industrial	CML - Senior	Direct Lending	CML - Industrial	CML - Retail
0.6%	2.9%	5.5%	2.4%	8.0%	5.5%	1.9%	-9.5%	5.8%	5.0%	4.5%	3.1%	3.8%
Leveraged Loans	CML - Industrial	CML - Industrial	Leveraged Loans	CML - Office	Mezzanine Debt	CML - Industrial	CML - Apartment	CML - Apartment	CML - Industrial	Investment Grade	CML - Apartment	CML - Office
0.5%	2.8%	5.2%	1.1%	7.9%	4.7%	1.8%	-9.8%	5.6%	4.8%	4.2%	3.0%	3.7%
Investment Grade	CML - Apartment	CML - Retail	High Yield	CML - Industrial	Leveraged Loans	CML - Office	High Yield	CML - Senior	CML - Office	Distressed Debt	CML - Office	Mezzanine Debt
-0.7%	2.7%	5.1%	-2.1%	7.5%	3.2%	1.6%	-11.2%	5.6%	3.6%	3.9%	2.9%	3.2%
High Yield	CML - Office	Leveraged Loans	Investment Grade	Distressed Debt	Distressed Debt	Investment Grade	Investment Grade	CML - Office	Investment Grade	Leveraged Loans	Investment Grade	Direct Lending
-4.5%	2.6%	4.2%	-2.5%	2.2%	1.8%	-1.0%	-15.8%	4.5%	2.1%	2.9%	2.4%	2.9%

Source: Bloomberg, Cliffwater, Gilberto-Levy, J.P. Morgan, Preqin, J.P. Morgan Asset Management.

CML is commercial mortgage loans. CML: Gilberto-Levy Commercial Mortgage Performance Index; Direct Lending: Cliffwater Direct Lending Index; Distressed Debt: Preqin Quarterly Distressed Debt Index; Investment Grade: Bloomberg U.S. Aggregate Credit - Corporates - Investment Grade Index; High Yield: Bloomberg U.S. Aggregate Credit - Corporate - High Yield Index; Leveraged Loans: J.P. Morgan Leveraged Loan Index; Mezzanine Debt: Preqin Quarterly Mezzanine Debt Index. Annualized return (Ann.) and volatility (Vol.) represents the 40-quarter period ending 12/31/2024. *Volatility is calculated as the annualized standard deviation of quarterly returns. Past performance is not a reliable indicator of current and future results.

J.P.Morgan ASSET MANAGEMENT

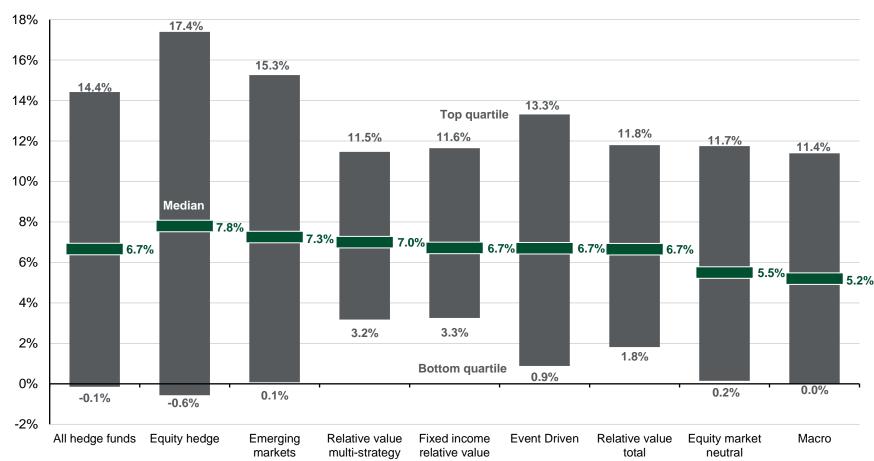


Hedge funds and manager selection

GTA MI 73

Hedge fund manager dispersion

Based on returns from 2015 - 2025* in USD



Source: PivotalPath, J.P. Morgan Asset Management.

*2025 data are as of 3Q25. Manager dispersion is based on monthly returns for hedge funds. Green bar denotes median. All hedge funds: Fund Weighted Composite Index, Equity hedge: Equity Hedge (Total), Relative value multi-strategy: Relative Value Multi-Strategy, Emerging markets: Emerging Markets Global, Relative value: Relative Value (Total), Event-driven: Event-Driven (Total), Equity market neutral: Equity hedge – equity market neutral, Macro total: Macro (Total). Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.





Hedge fund strategy returns

GTA MI 74

											2015 -	- 2024
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	3Q25	Ann.	Vol.
Merger Arbitrage	Distressed	Global Equities	Eq. Market Neutral	Global Equities	Global Equities	Global Equities	Global Macro	Global Equities	Global Equities	Global Equities	Global Equities	Global Equities
7.8%	15.3%	24.6%	5.8%	27.3%	16.8%	19.0%	11.5%	22.8%	18.0%	18.9%	9.8%	15.8%
Eq. Market Neutral	Global Equities	Equity Long/Short	Relative Value	Equity Long/Short	Relative Value	Distressed	Eq. Market Neutral	Equity Long/Short	Distressed	Equity Long/Short	Eq. Market Neutral	Equity Long/Short
7.1%	8.5%	11.5%	3.7%	12.6%	16.1%	16.9%	7.1%	11.0%	14.2%	13.1%	7.8%	8.4%
Relative Value 5.7%	Relative Value 6.1%	PivotalPath Composite 8.0%	Merger Arbitrage	Merger Arbitrage	Eq. Market Neutral 13.8%	Eq. Market Neutral	Relative Value 5.5%	Eq. Market Neutral	Equity Long/Short 12.6%	PivotalPath Composite	Relative Value	Distressed
5.7%			3.2%	10.2%	13.8%	11.9%	5.5%	8.5%		8.7%	7.5%	7.6%
Equity Long/Short	Global Macro	Global Bonds	Distressed	PivotalPath Composite	Equity Long/Short	Relative Value	Merger Arbitrage	Distressed	PivotalPath Composite	Global Bonds	Equity Long/Short	Global Bonds
4.3%	5.1%	7.4%	- 1.1%	9.0%	13.4%	9.5%	1.7%	7.8%	10.6%	7.9%	6.3%	7.4%
PivotalPath Composite	PivotalPath Composite	Distressed	Global Bonds	Relative Value	PivotalPath Composite	Equity Long/Short	PivotalPath Composite	PivotalPath Composite	Relative Value	Merger Arbitrage	PivotalPath Composite	Merger Arbitrage
2.5%	5.0%	7.1%	- 1.2%	7.3%	11.4%	9.3%	- 1.1%	7.6%	9.9%	7.5%	5.8%	6.8%
Global Macro	Eq. Market Neutral	Eq. Market Neutral	PivotalPath Composite	Eq. Market Neutral	Global Bonds	Merger Arbitrage	Distre sse d	Relative Value	Eq. Market Neutral	Global Macro	Distressed	PivotalPath Composite
2.3%	2.6%	6.1%	- 1.6%	6.9%	9.2%	8.9%	-2.7%	6.2%	8.7%	7.4%	5.4%	5.9%
Global Equities	Equity Long/Short	Relative Value	Global Macro	Global Bonds	Merger Arbitrage	PivotalPath Composite	Equity Long/Short	Global Bonds	Global Macro	Relative Value	Merger Arbitrage	Global Macro
- 1.8%	2.2%	6.0%	-2.0%	6.8%	5.9%	7.8%	-7.0%	5.7%	6.4%	6.9%	5.0%	4.3%
Global Bonds	Global Bonds	Merger Arbitrage	Equity Long/Short	Global Macro	Global Macro	Global Macro	Global Bonds	Merger Arbitrage	Merger Arbitrage	Eq. Market Neutral	Global Macro	Eq. Market Neutral
-3.2%	2.1%	3.0%	-4.8%	5.6%	4.9%	4.3%	- 16.2%	3.7%	5.5%	6.3%	4.0%	3.0%
Distressed	Merger Arbitrage	Global Macro	Global Equities	Distressed	Distre sse d	Global Bonds	Global Equities	Global Macro	Global Bonds	Distressed	Global Bonds	Relative Value
-7.4%	0.6%	0.9%	-8.9%	1.8%	4.7%	-4.7%	- 18.0%	1.1%	- 1.7%	6.0%	0.2%	2.8%

Source: Bloomberg, FactSet, MSCI, PivotalPath, J.P. Morgan Asset Management.

All returns are in USD. Global equities reflect the MSCI AC World Index and global bonds reflect the Bloomberg Global Aggregate Index. All hedge fund returns are from PivotalPath. PivotalPath Composite: PivotalPath Composite Index. Annualized return (Ann.) and volatility (Vol.) represents the 40-quarter period ending 12/31/2024. Please see disclosure pages for category definitions. Past performance is not a reliable indicator of current and future results.

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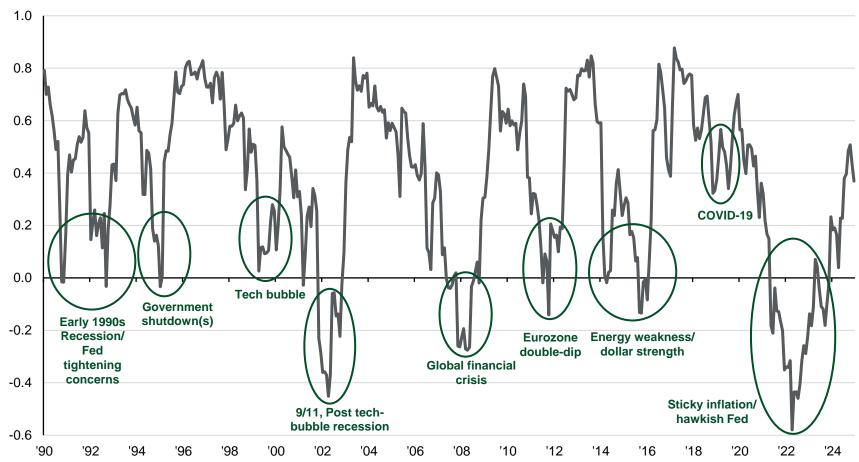


Hedge funds and traditional portfolios

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Hedge fund correlation with a 60/40 stock-bond portfolio





Source: Bloomberg, FactSet, HFR, Standard & Poor's, J.P. Morgan Asset Management. 60/40 portfolio is 60% S&P 500 and 40% Bloomberg U.S. Aggregate. Hedge funds are represented by HFRI Macro. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.





Hedge fund performance and volatility

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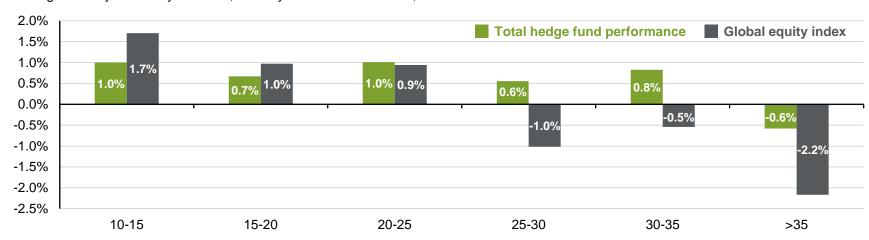
Macro hedge fund relative performance and volatility

VIX index level, year-over-year change in relative performance of PivotalPath Global Macro Index



Hedge funds vs. global equity performance and volatility

Average monthly returns by VIX level, January 1998 – October 2025, total return



Source: Bloomberg, CBOE, FactSet, MSCI, PivotalPath, Standard & Poor's, J.P. Morgan Asset Management.

Monthly VIX reading is an average. 60/40 portfolio = 60% S&P 500 Total Return Index and 40% Bloomberg U.S. Aggregate Total Return Index. (Top) Macro hedge fund relative performance volatility is since 6/30/1998. Numbers may not sum to aggregate total return due to rounding. (Bottom) Global equity index = MSCI All Country World Index. Past performance is not a reliable indicator of current and future results.

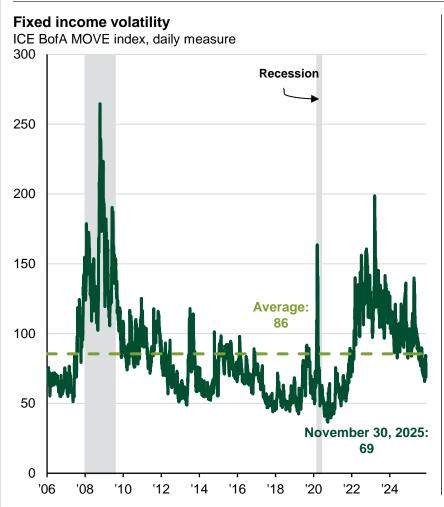
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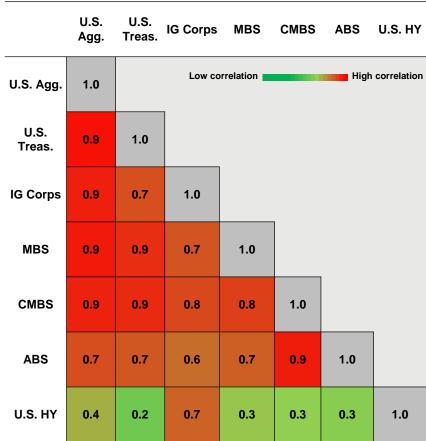
U.S. fixed income volatility and correlations

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Fixed income sector correlations

Past 10 years, weekly total return



Source: Bank of America, Bloomberg, FactSet, Intercontinental Exchange, J.P. Morgan Asset Management. (Left) The Merrill Lynch Option Volatility Estimate Index (MOVE) is a measure of the implied volatility of U.S. Treasury options. (Right) All indices used are Bloomberg and are being evaluated on a weekly total return basis. "U.S. Agg.": Bloomberg U.S. Aggregate Index. "US Treas.": Bloomberg U.S. Aggregate Government-Treasury Index. "IG Corps": Bloomberg U.S. Corporate Investment Grade Index. "MBS": Bloomberg U.S. Aggregate Securitized-ABS Index. "U.S. HY": Bloomberg U.S. Aggregate Credit-Corporate-High Yield Index. Past performance is not a reliable indicator of current and future results. Guide to Alternatives. Data are based on availability as of November 30, 2025.



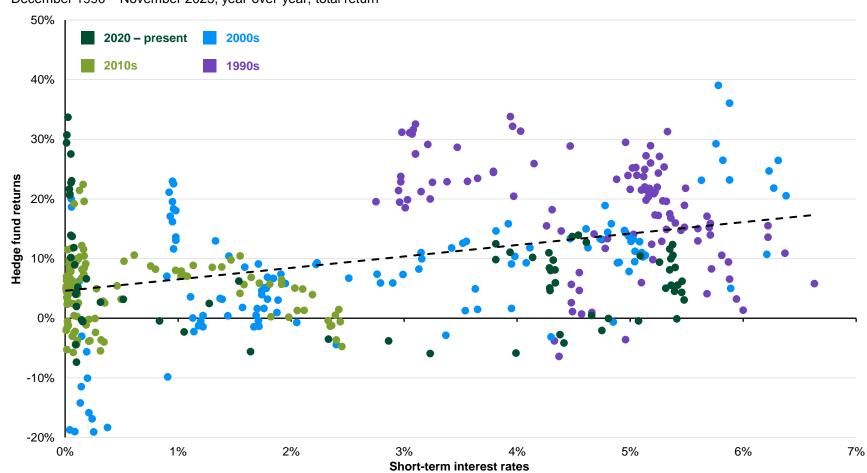


Hedge fund returns and interest rates

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Hedge fund returns and short rates

December 1990 – November 2025, year-over-year, total return



Source: FactSet, HFR, J.P. Morgan Asset Management.

Short-term interest rates: 3-month U.S. T-bill yields represented by the Bloomberg U.S. Short Treasury (1-3 months) Index, Hedge fund returns: HFRI Fund Weighted Composite (USD) Index. Past performance is not a reliable indicator of current and future results. *Guide to Alternatives.* Data are based on availability as of November 30, 2025.





J.P. Morgan Asset Management - Definitions

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Real estate

Base rent – The gross revenue from rental payments.

Capitalization rate (Cap rate) – The rate of return on a real estate investment property defined as the net operating income from the property divided by the current market price of the property.

Cap rate spread – The difference between the cap rate and a Treasury security with the same maturity.

Core real estate – High-quality properties in primary markets with high occupancy rates, credit-worthy tenants and long leases.

Effective rent – Base rent less rental concessions and tenant improvements.

Gross absorption - Space that became physically occupied in a specific period.

Mezzanine debt – Financing that is half-way between equity and debt by which the lender can convert to equity if the loan is not paid on time or in full.

Net absorption – Space that became physically occupied minus space that was physically vacated in a specific period.

Net absorption rate – Net absorption during a specific period divided by space available to lease at the start of that period.

Occupancy rate – The percentage of available space that is occupied.

Real estate prime yield - The real estate yield on a property at a prime location.

Real estate net operating income – Income after operating expenses but before interest, taxes, capital spending, depreciation and amortization.

Real estate yields – Annual income divided by total investment. Note that annual income, unlike NOI, does deduct interest costs so that real estate yields should be lower than cap rates.

Real estate yield spread – The difference between the yields and a Treasury security with the same maturity.

Vacancy rate - The percentage of available space that is unoccupied.

Private equity

Buyout fund – Private equity fund that focuses on taking a majority stake or full control of mature, undervalued companies.

Called capital – The amount of capital wired to a fund that is "drawn down" over time as the general partner selects investments.

Committed capital – The specific amount of capital that a limited partner is obliged to provide to a closed-end fund for investments. The capital commitment is "drawn down" or "called" over time, meaning a portion of the commitment must be wired to the closed-end fund by a set date.

Corporate mergers and acquisition (M&A) – The consolidation of companies through financial transactions.

Dry powder – The amount of capital that has been committed to a private capital fund minus the amount that has been called by the general partner for investment.

Earnings before interest, taxes, depreciation and amortization (EBITDA) – A broad measure of the cash profit generated by a company's operations.

Enterprise value (EV) – The total value of a company including equity and debt.

General partner (GP) – The managing partner of a limited partnership. The general partner is managed by the asset management team responsible for making fund investments (i.e., the intermediary between investors with capital and businesses seeking capital to grow).

Growth fund – Private equity fund that targets firms with the potential for scalable and renewed growth.

Initial public offering (IPO) – When shares of a private company are made available to the public for the first time.

Internal rate of return (IRR) – The dollar-weighted internal rate of return. This return considers the daily timing of cash flows and cumulative fair stated value, as of the end of the reported period.

Leveraged buyout (LBO) – The acquisition of another company using a significant amount of debt to finance the acquisition.

Limited partner (LP) – An investor in a limited partnership, which is a form of legal entity used for certain hedge funds, private equity funds and real estate funds.

Middle market - Companies having revenues between \$10 million and \$1 billion.

Multiple of invested capital (MOIC) – Calculation performed by adding the remaining (reported) value and the distributions received (cash out) and subsequently dividing that amount by the total capital contributed.

Net asset value (NAV) – This is the current fair stated value for each of the investments, as reported by the administrator of the fund.

Private equity – Equity capital invested in a private company through a negotiated process.

Sponsor-backed acquisition – Acquisition of a company by a private equity firm.

Secondary fund – Private equity funds that purchase existing assets from a primary private equity fund.

Venture capital – A specialized form of private equity, characterized chiefly by high-risk investment in new or young companies following a growth path in technology and other value-added sectors.





J.P. Morgan Asset Management - Definitions

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Private credit

Amend and extend – A technique that allows an issuer to delay part of its loan maturity or amend existing terms through an amendment rather than a refinancing.

Covenant-lite loans – A type of financing that is issued with fewer restrictions on the borrower regarding collateral, level of income and loan payment terms, and fewer protections for the lender, including financial maintenance tests that measure the debt-service capabilities of the borrower.

Direct lending – A loan made by an investor or non-bank lender to a company.

Distressed debt – The securities of a company that has either defaulted, is under bankruptcy protection or is in financial distress and is moving toward default or bankruptcy in the near future.

Hedge-adjusted yield – The yield on a foreign currency denominated asset minus the cost of hedging the asset back into U.S. dollars. For assets in countries with short-term rates that are lower than U.S. rates, the hedge-adjusted yield will be lower than the yield denominated in foreign currency.

Leveraged loan – A commercial loan provided by a group of lenders that is either: 1) rated BB+ or lower, 2) not rated or rated BBF- or higher and has a base rate spread of 125 bps or higher and is secured by a first or second lien. This loan is structured, arranged and administered by one or several banks, and is then syndicated to other institutional investors. As such, this market is often referred to as the broadly syndicated loan market.

Mezzanine commercial real estate debt – Loan finance that is half-way between equity and secured debt, either unsecured or with junior access to security. A mezzanine fund is a fund focusing on mezzanine financing.

Net IRR – The dollar-weighted internal rate of return, net of management fees and carried interest generated by the fund. This return considers the daily timing of all cash flows and the cumulative fair stated value, as of the end of the reported period.

Non-sponsored loan – Credit provided to a business that is *not* wholly owned or majority owned by a private equity firm or another financial sponsor.

Payment-in-kind (PIK) – An interest payment in which the borrower makes an interest payment in forms other than cash. This includes, but is not limited to, a type of debt whose interest payments come in the form of additional debt accrued onto existing debt.

Performing loans – Loans that are not in default.

Private credit – Nonbank corporate credit provided through bilateral agreements or small "club deals" outside the realm of public securities or commercial banks. This definition excludes bank loans, broadly syndicated loans and funding provided through publicly traded assets such as corporate bonds.

Special situations – Non-traditional financing scenarios for distressed or urgent borrower needs.

Sponsored loan – Credit provided by a non-bank lender to a business that is either wholly owned or majority owned by a private equity firm or another financial sponsor.

Syndicated loan – A loan extended by a group of financial institutions, often referred to as a loan syndicate, to a single borrower.

Hedge funds

Distressed securities – Funds that invest in debt and equity securities of firms in reorganization or bankruptcy.

Long/short (L/S) equity – Funds that involve long and/or short positions in equity securities deemed to be under- or overvalued, respectively. Exposures to sectors, geographies and market capitalizations are often flexible and will change over time.

Merger arbitrage/event-driven – Funds that invest in opportunities created by significant corporate transactions and events that tend to alter a company's financial structure or operating strategy.

Opportunistic/Macro – Funds that involve investments in a wide variety of strategies and instruments, which often have a directional stance based on the manager's global macroeconomic views.

Relative value/Arbitrage – Funds that involve the simultaneous purchase and sale of similar securities to exploit pricing differentials. Strategies in this sector offer potential to generate consistent returns while minimizing directional risk.





J.P. Morgan Asset Management - Risks & disclosures

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