ETF Insights

Guide to ETFs

EMEA | 3Q 2026

As of 30 June 2026

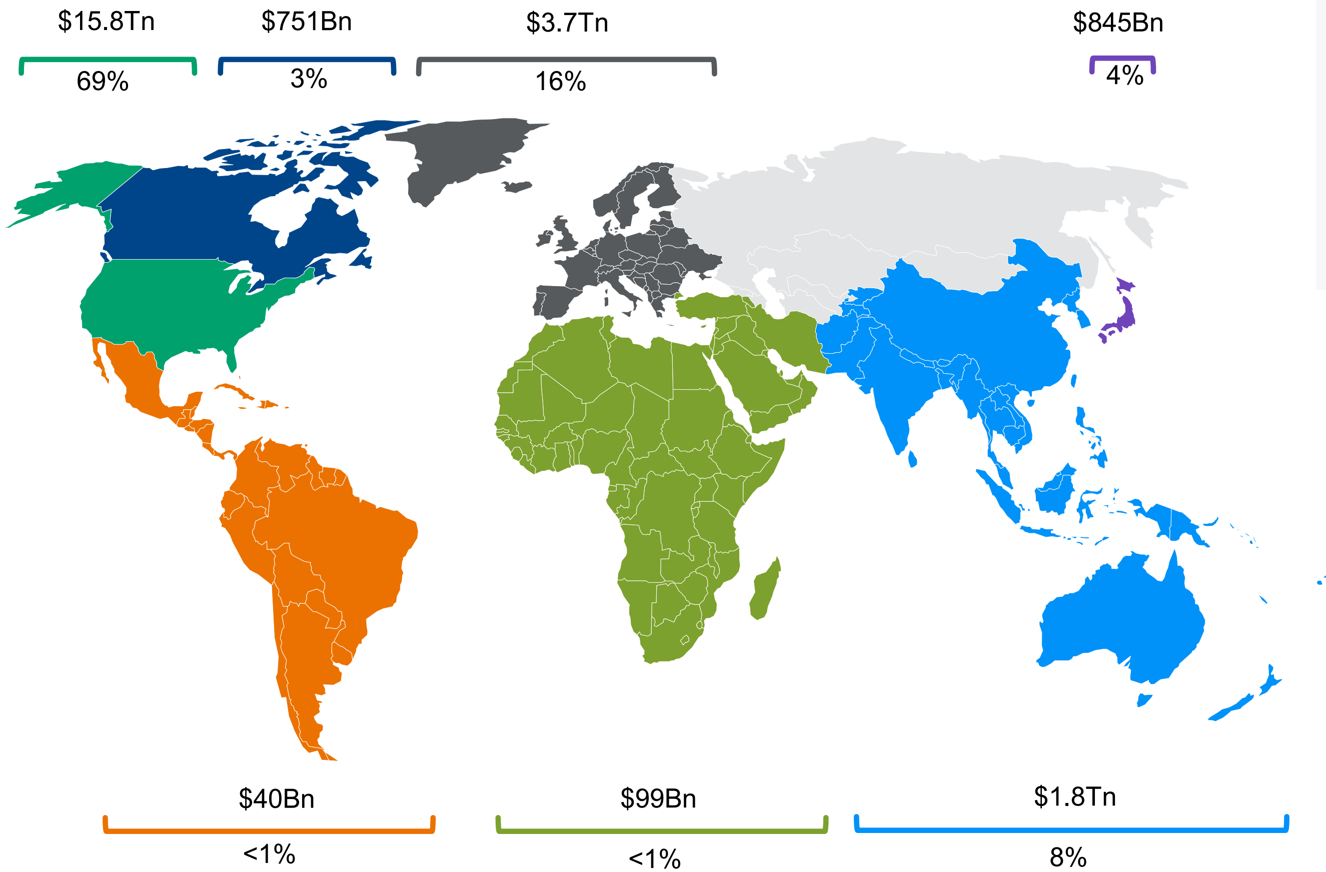
J.P.Morgan ASSET MANAGEMENT

Page reference

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Global ETF AUM by region

European market represents 16% of the global ETF landscape



2026 Global ETF landscape

No. of ETFs	**~15,400**
ETF assets	**~$23.0Tn**
Net flows	**~+$1.2Tn**

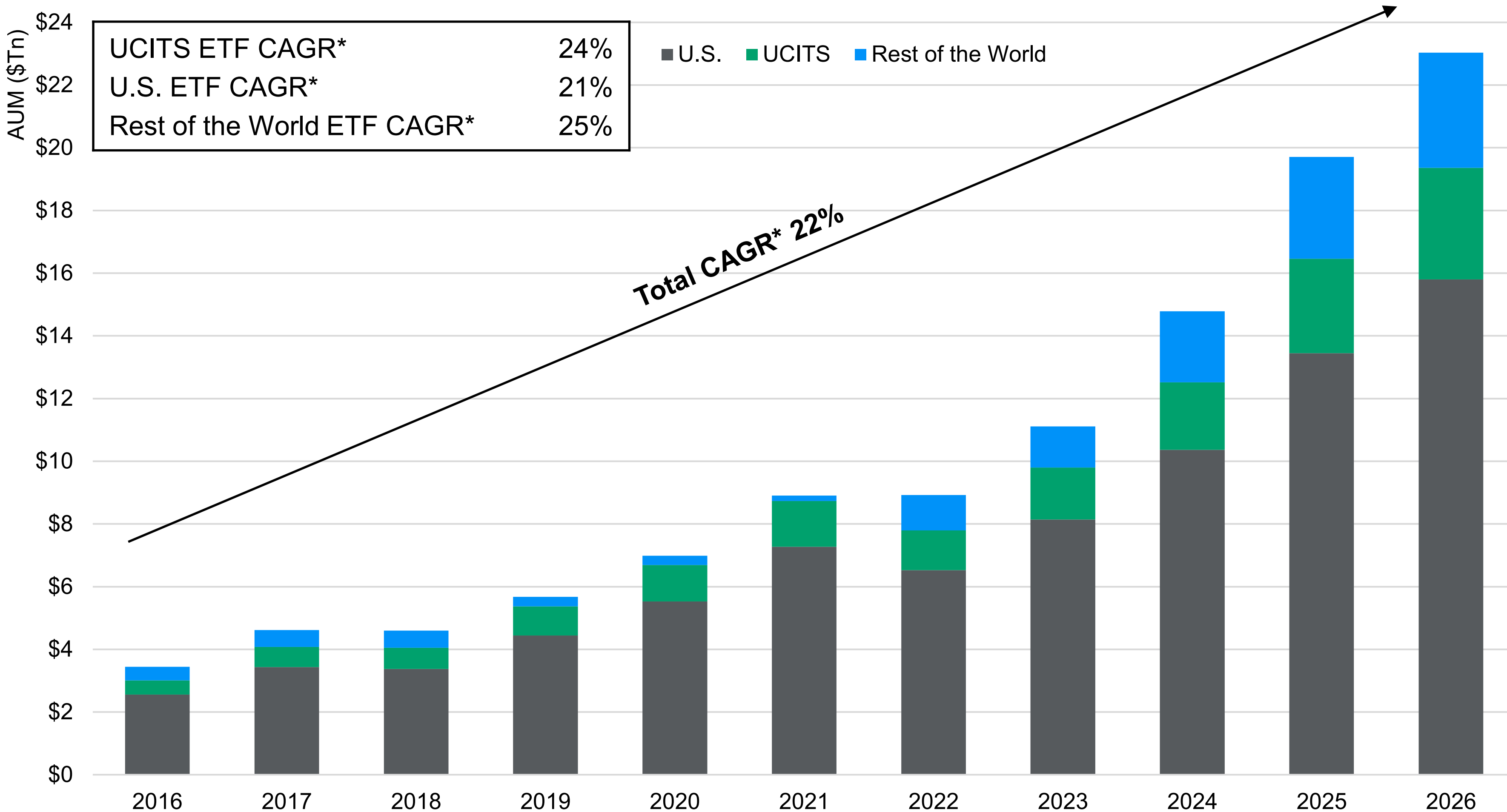
15 years of consecutive net flows

Source: Bloomberg, J.P. Morgan Asset Management. Provided for information only to illustrate macro trends, not to be construed as offer, research or investment advice. Assets are represented by ETFs across countries of domicile in USD. Global consists of Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, Finland, France, Germany, Guernsey, Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Israel, Japan, Luxembourg, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Saudia Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UAE, United States and Vietnam. Dark green represent the U.S., dark blue represents Canada, orange represents Latin America and South America, gray represents Europe, light green represents Africa and Middle East, light blue represents APAC, purple represents Japan.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Global ETF AUM growth over time

UCITS ETF CAGR*	24%
U.S. ETF CAGR*	21%
Rest of the World ETF CAGR*	25%

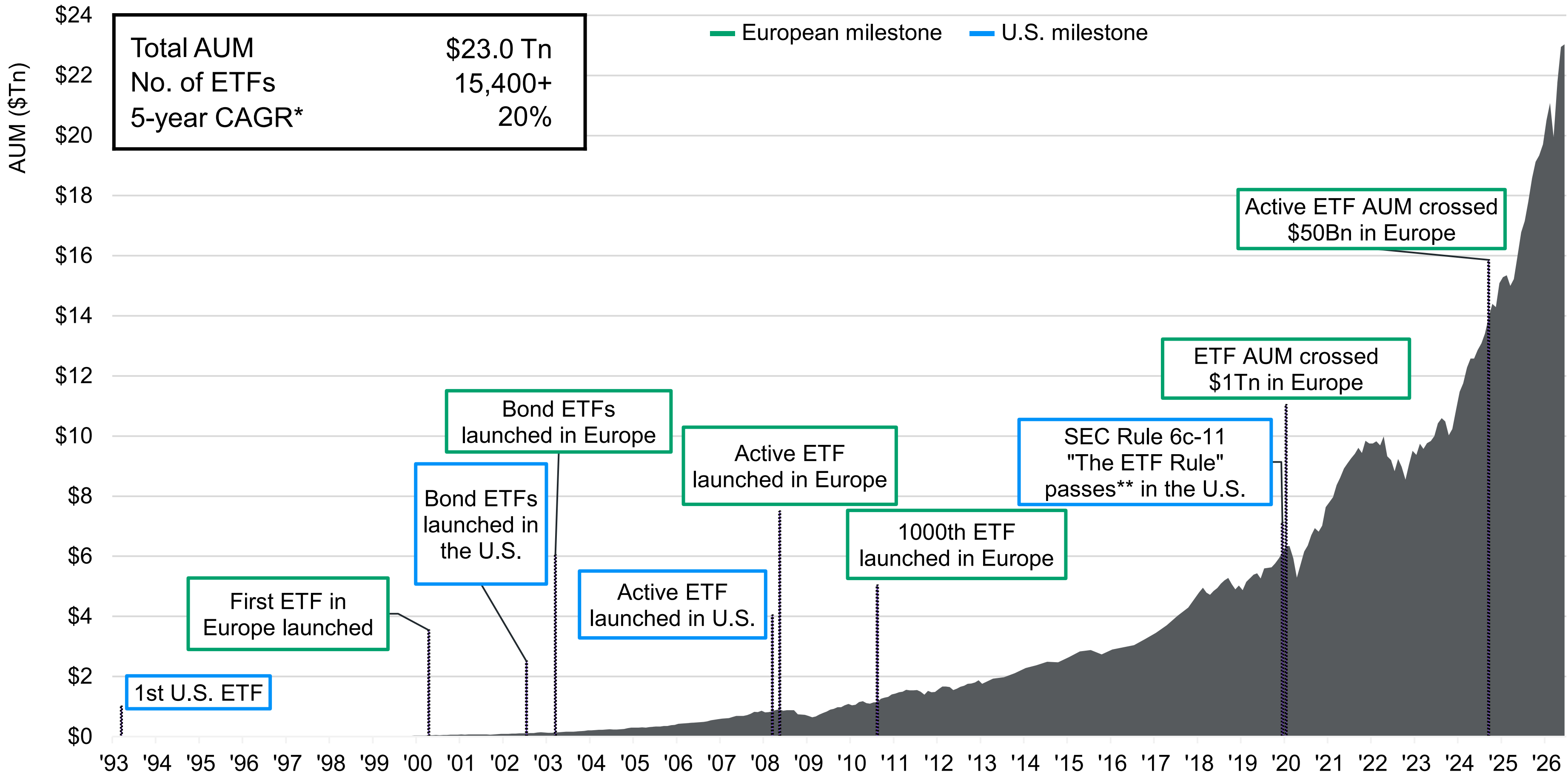


Source: Bloomberg, J.P. Morgan Asset Management. UCITS ETFs as defined by Bloomberg. Rest of the world consists of Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, Guernsey, Hong Kong, Hungary, India, Indonesia, Israel, Japan, Malaysia, Mauritius, Mexico New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Saudia Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, UAE, Vietnam, and non-UCITS ETFs in France, Germany, Ireland, Luxembourg, Sweden, Switzerland and the United Kingdom. *Compound annual growth rate (CAGR).
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Global ETF market milestones

ETF assets have grown significantly over the past two decades



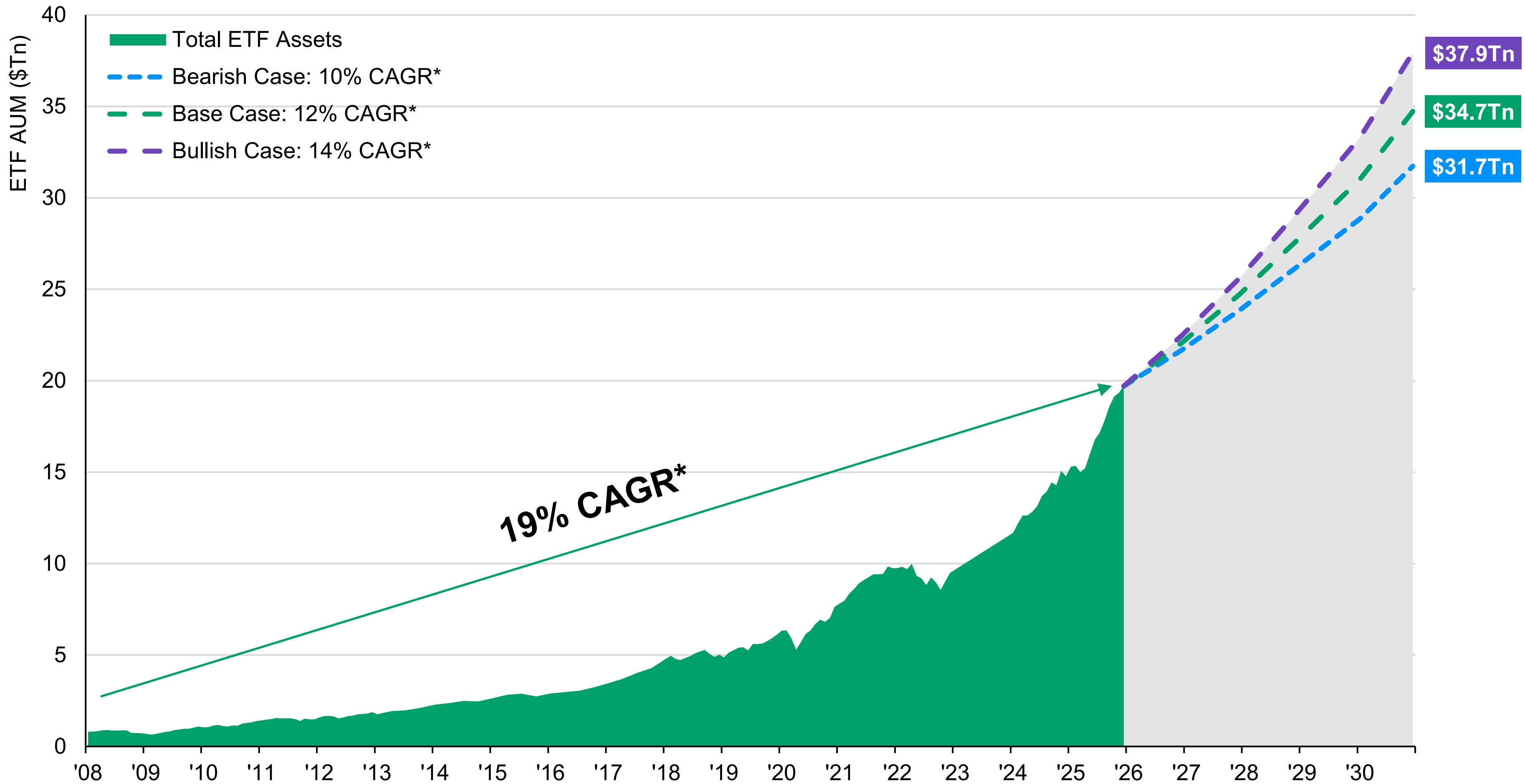
Source: Bloomberg, J.P. Morgan Asset Management. *Compound annual growth rate (CAGR). **The ETF Rule, passed in 2019 modernized regulation of ETFs as open-ended funds by establishing clear and consistent framework for most ETFs across both index and actively managed strategies, enabling ETF issuers to bring new strategies to market, and permitting “custom in-kind” creation and redemption baskets to be available for all types of covered ETFs under the new regulation.
Guide to ETFs – EMEA. Data as 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

Global ETF assets projections

Assets are projected to reach ~$35Tn in 2030



Source: Bloomberg, J.P. Morgan Asset Management. Data as of 31 December 2025. *Compound annual growth rate (CAGR). Growth projections are J.P. Morgan Asset Management.

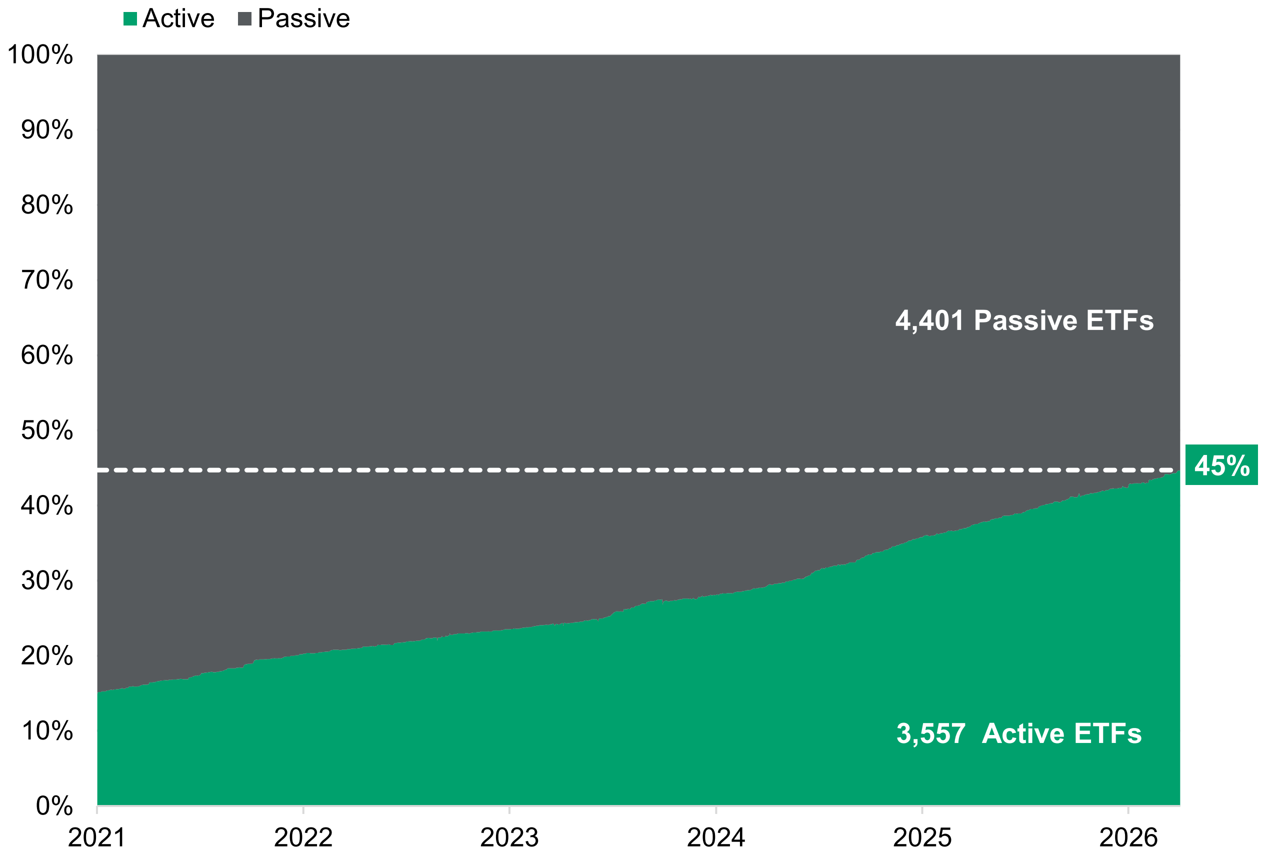
For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

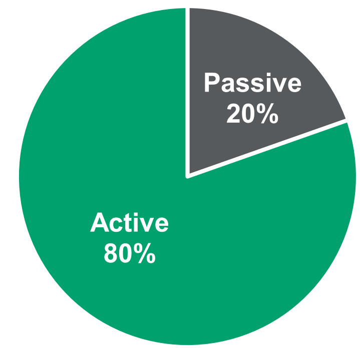
UCITS and U.S. ETF products and launches

Active product launches are on the rise globally

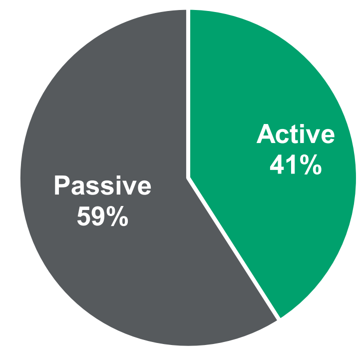
Passive vs. Active
(% of total ETFs by product count includes UCITS ETFs and U.S. ETFs)



U.S. total ETFs launched TTM*



UCITS total ETFs launched TTM*



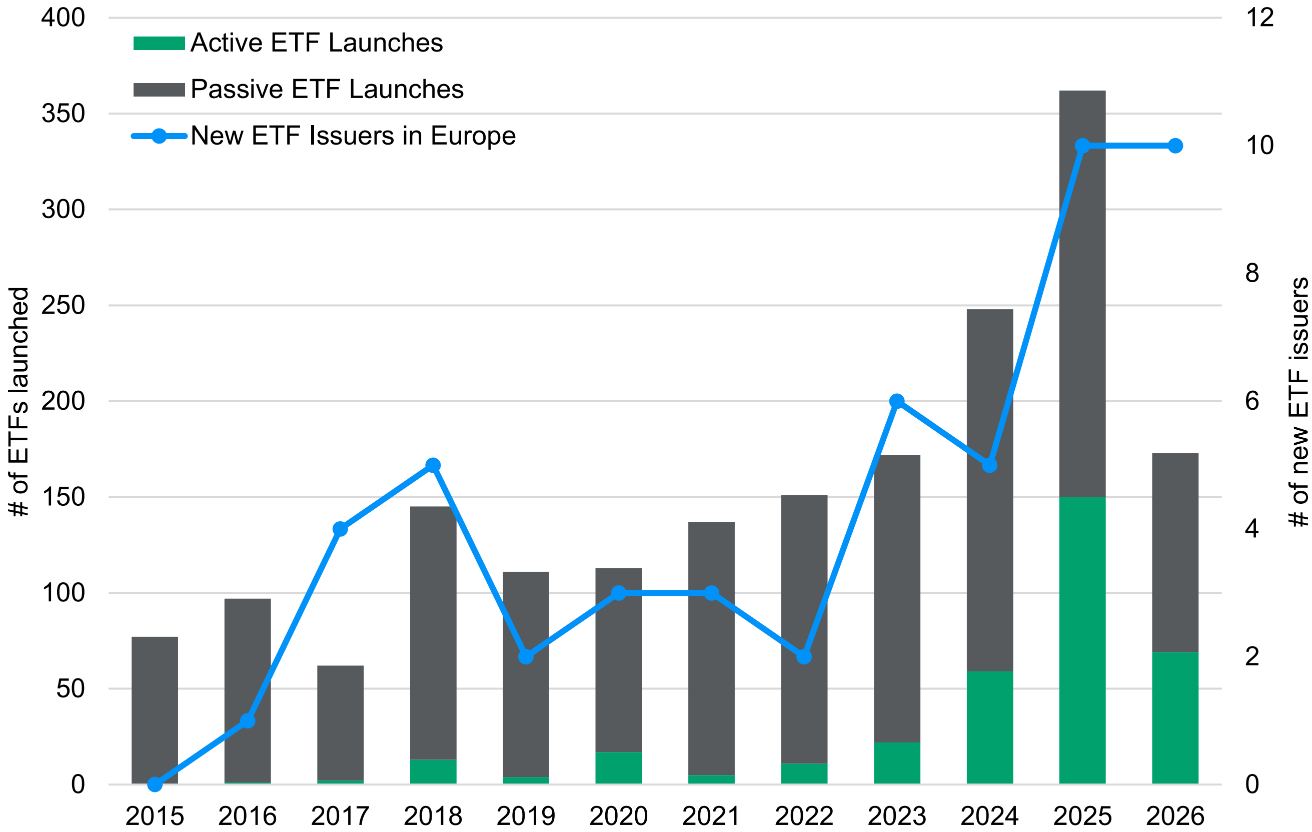
Source: Bloomberg, J.P. Morgan Asset Management. US and UCITS ETFs, as defined by Bloomberg, only. Passive includes market cap and factor ETFs.
*Trailing twelve months (TTM).
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

UCITS ETF launches and new issuers

Active and passive launches climb in Europe as new entrants expand the issuer base



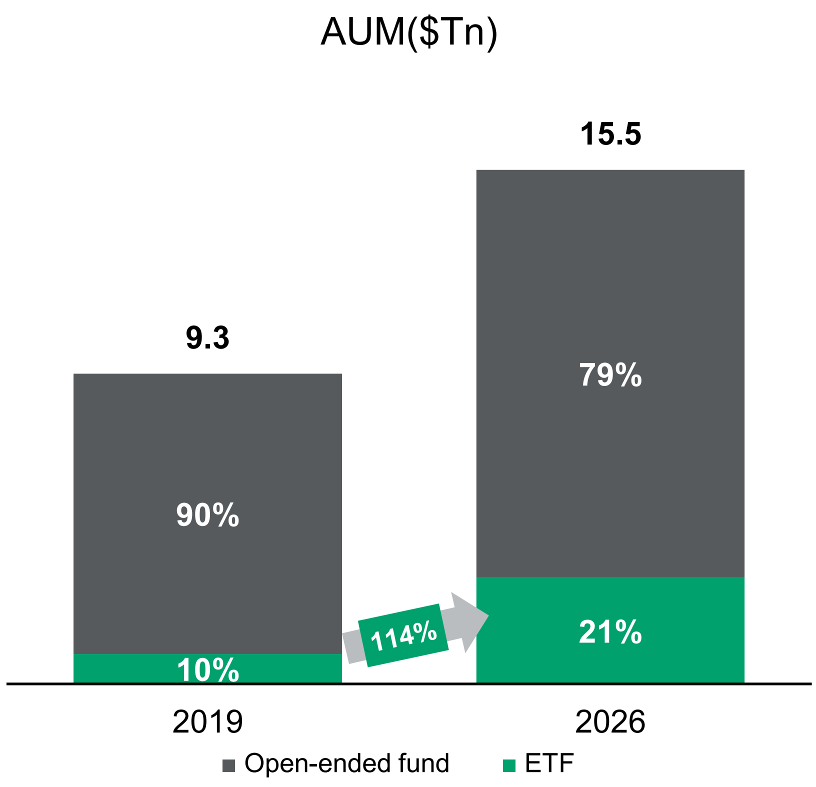
- Active ETF launched in 2025 are more than 8x the amount launched in 2020
- 2025 was a record year for new ETF entrants as momentum grows within the space

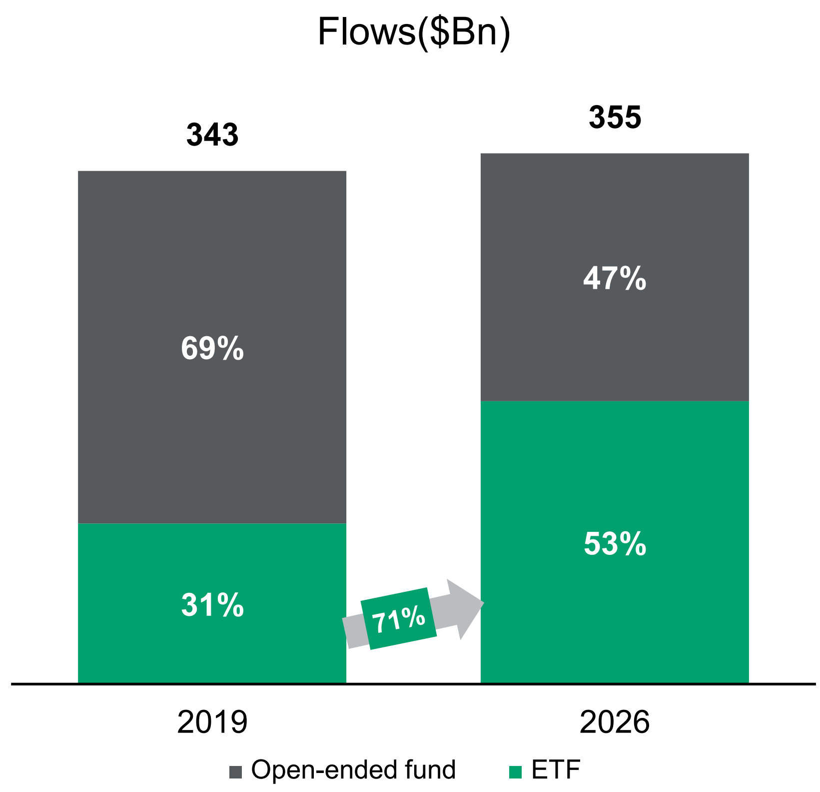
Source: Bloomberg, J.P. Morgan Asset Management.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

UCITS ETFs AUM and flows

Increasing investor demand for UCITS ETFs





Source: Morningstar, J.P. Morgan Asset Management, charts reflect the most recently available data as of 31 May 2026. Includes UCITS ETFs only. Excluding money market and fund of funds.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Top 10 UCITS ETF industry leaders

Overall UCITS ETF leaders by YTD net flows ($Mn)

	Issuer	AUM	YTD flow	1Y flow	1M flow	2026 Organic growth rate	Total products/ TTM*
1	BlackRock	1,417,108	73,155	141,148	11,695	6%	476 / 43
2	Amundi	503,940	33,102	64,928	5,547	8%	363 / 25
3	Vanguard	279,279	24,336	36,765	5,659	10%	42 / 6
4	Xtrackers	367,789	21,497	40,412	5,265	7%	279 / 34
5	SPDR	176,979	21,253	29,949	5,140	15%	118 / 17
6	UBS	170,700	15,259	26,278	223	11%	146 / 12
7	Invesco	162,958	10,364	21,217	3,817	8%	172 / 18
8	VanEck	44,439	9,594	15,141	534	31%	39 / 2
9	BNP Paribas	78,022	6,950	11,757	1,569	11%	113 / 35
10	WisdomTree	16,605	3,513	4,944	-419	28%	50 / 14
	Other	341,431	27,826	51,723	4,362	10%	748 / 181
	TOTAL	**3,559,250**	**247,037**	**443,941**	**43,423**	**8%**	**2,546 / 387**

Industry flows by category ($Mn)

Overall exposure	YTD flow	AUM
Global Large-Cap Blend Equity	70,057	645,134
US Large-Cap Blend Equity	28,260	713,136
Global Emerging Markets Equity	16,242	198,614
Global Equity Income	8,335	39,296
Sector Equity Industrial Materials	8,330	34,752
EUR Government Bond	6,565	79,611
Sector Equity Technology	6,059	104,344
Europe Large-Cap Blend Equity	5,468	168,417
EUR Money Market	4,830	25,008
Other Bond	4,594	13,724
Other	88,297	1,537,216
Total	**247,037**	**3,559,250**

Active UCITS ETF leaders by YTD net flows ($Mn)

	Issuer	AUM	YTD flow	1Y flow	1M flow	2026 Organic growth rate	Total products/ TTM*
1	Invesco	7,142	3,320	4,588	1,328	101%	14 / 7
2	JPMorgan	51,026	3,015	4,910	703	7%	46 / 10
3	BlackRock	10,275	2,774	5,952	651	42%	30 / 14
4	Goldman Sachs	2,690	1,952	2,284	446	360%	15 / 5
5	Schroders	2,641	1,758	2,414	11	234%	2 / 2
6	Fidelity	12,058	1,323	2,784	163	14%	18 / 5
7	Vanguard	3,478	951	1,277	176	40%	5 / 1
8	ORIX Corp	2,791	896	2,096	125	56%	11 / 6
9	DFA	2,004	731	731	316	N/A	2 / 2
10	Xtrackers	2,402	719	954	47	49%	17 / 9
	Other	37,796	3,474	8,767	363	14%	207 / 96
	TOTAL	**134,304**	**21,046**	**36,898**	**4,339**	**22%**	**367 / 157**

Industry flows by category ($Mn)

Active exposure	YTD flow	AUM
Global Large-Cap Blend Equity	3,780	33,563
US Large-Cap Blend Equity	3,090	23,459
Other Bond	2,114	3,876
Global Emerging Markets Equity	1,933	13,008
Global Corporate Bond - USD Hedged	1,316	1,449
EUR Money Market - Short Term	1,298	2,385
US Equity Income	1,108	4,193
Europe Large-Cap Blend Equity	927	7,593
Japan Large-Cap Blend Equity	656	2,397
Global Corporate Bond	588	1,697
Other	4,236	40,685
Total	**21,046**	**134,304**

Source: Bloomberg, FactSet, J.P. Morgan Asset Management. Includes UCITS ETFS only. The companies discussed are shown for illustrative purposes only. Their inclusion should not be interpreted as a recommendation to buy or sell. Organic growth rate calculated as YTD Flows / 2025 AUM. * Trailing twelve months (TTM).

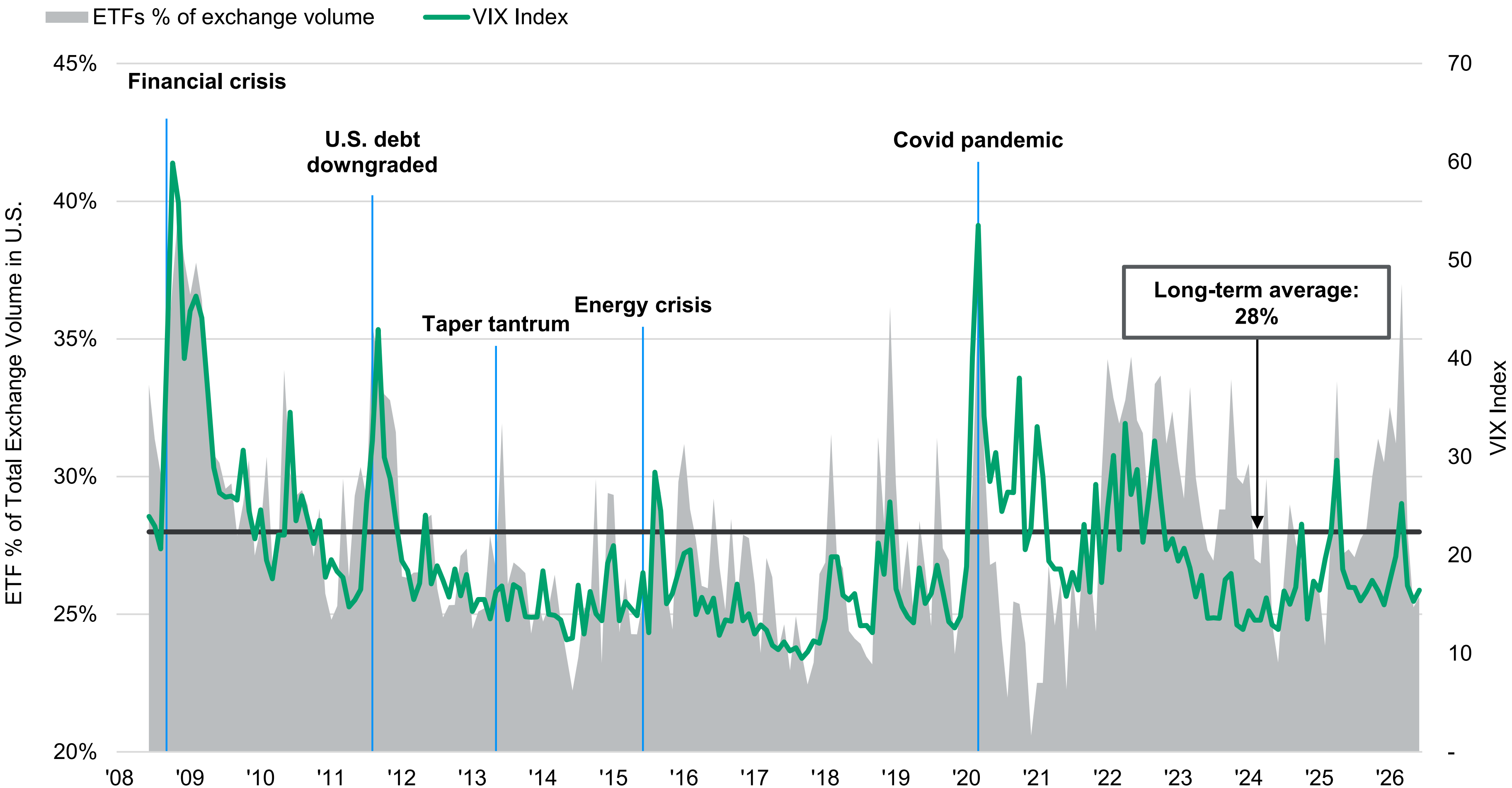
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

U.S. ETF exchange volume during periods of volatility

Exchange volume highlights ETF market's liquidity



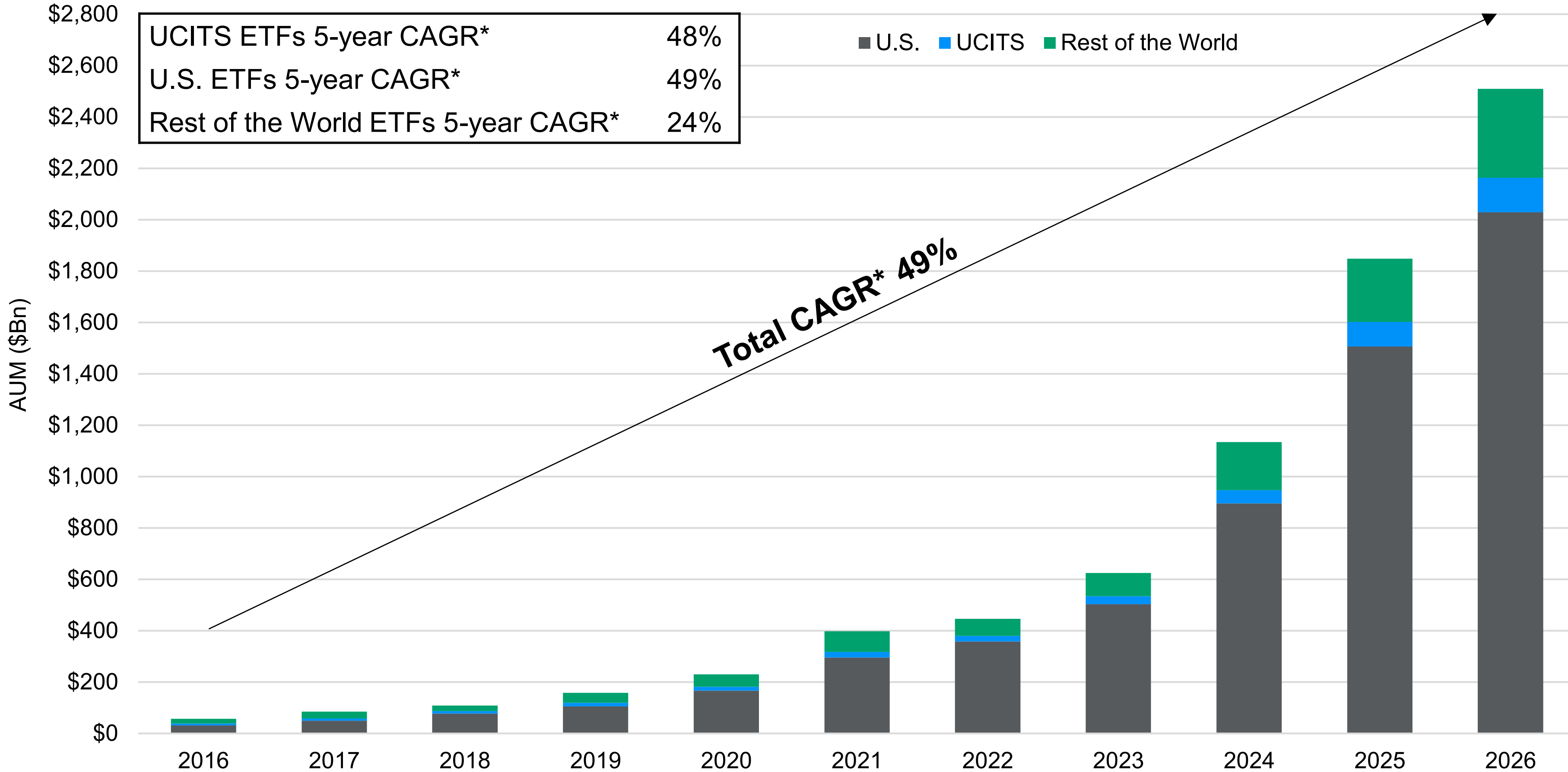
Source: Bloomberg, J.P. Morgan Asset Management. The CBOE Volatility Index, or VIX Index, is a real-time market index representing the market's expectations for volatility over the coming 30 days.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

Global active ETF growth

UCITS ETFs 5-year CAGR*	48%
U.S. ETFs 5-year CAGR*	49%
Rest of the World ETFs 5-year CAGR*	24%

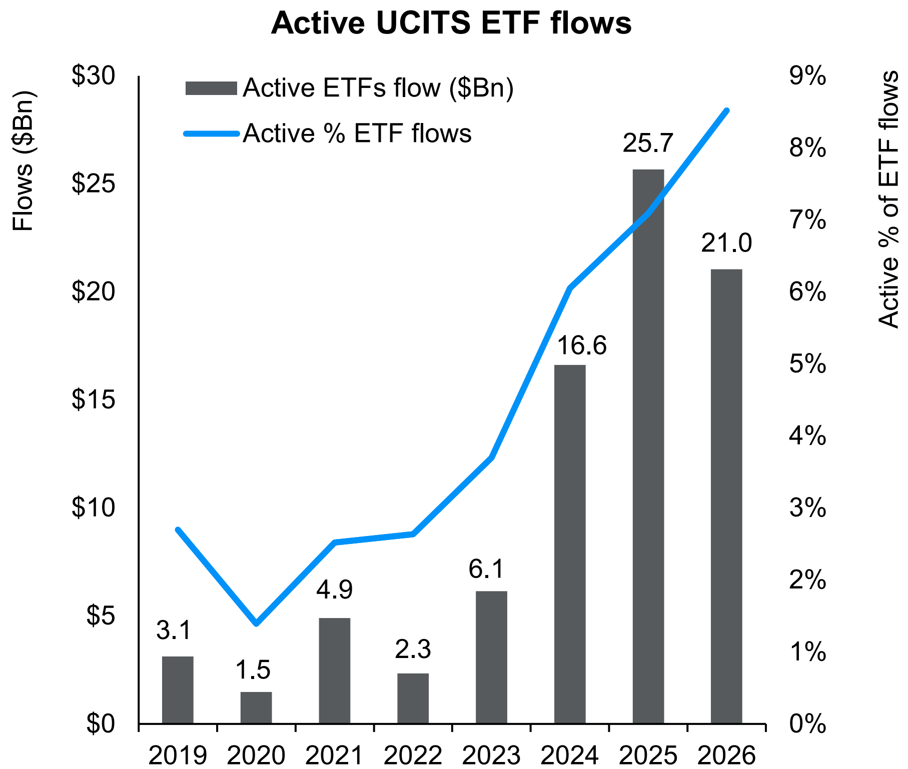


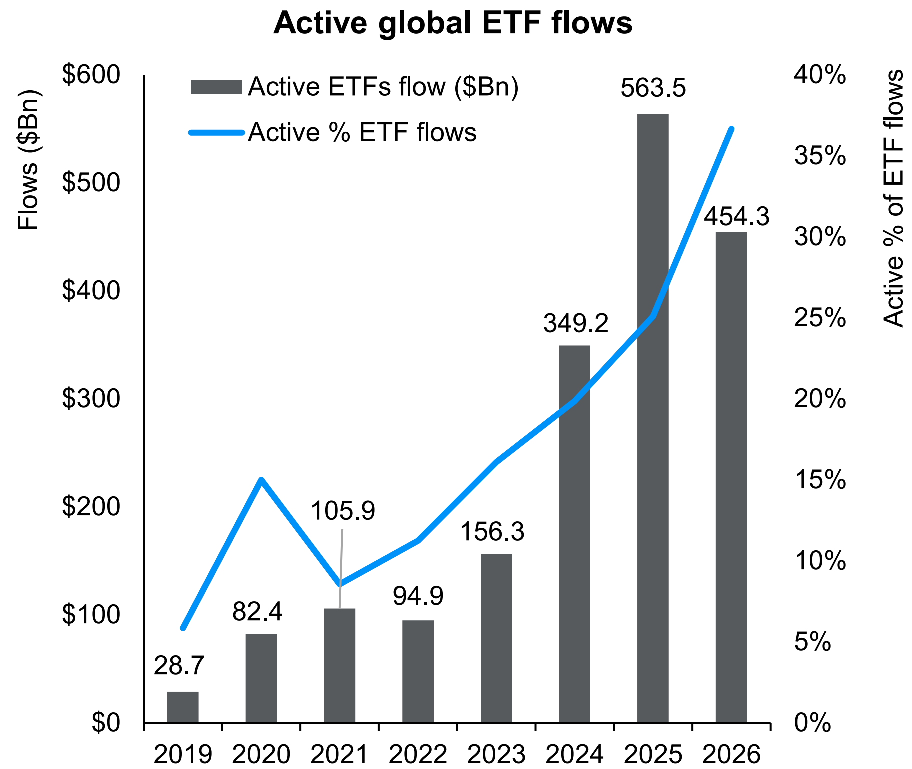
Source: Bloomberg, J.P. Morgan Asset Management. Active ETFs are determined by non-index funds. UCITS ETFs as defined by Bloomberg *Compound annual growth rate (CAGR). Source: Bloomberg, J.P. Morgan Asset Management. Rest of the world consists of Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, Guernsey, Hong Kong, Hungary, India, Indonesia, Israel, Japan, Malaysia, Mauritius, Mexico New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Saudia Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, UAE, Vietnam, and non-UCITS ETFs in France, Germany, Ireland, Luxembourg, Sweden, Switzerland and the United Kingdom.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Active UCITS ETF and global ETF flows

2025 was a record year for active flows





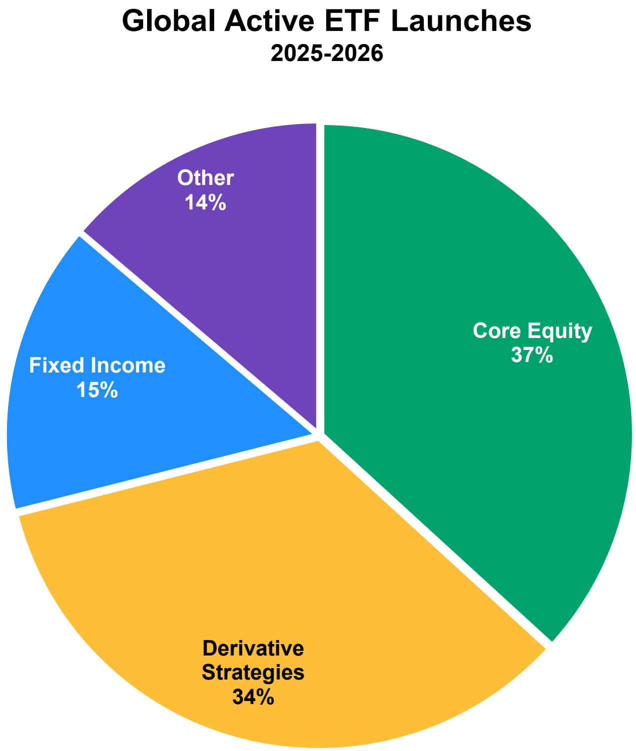
- Active UCITS ETFs represent about 9% of UCITS ETF flows ($247Bn) in 2026
- Active global ETFs represent about 37% of global ETF flows ($1.2Tn) in 2026

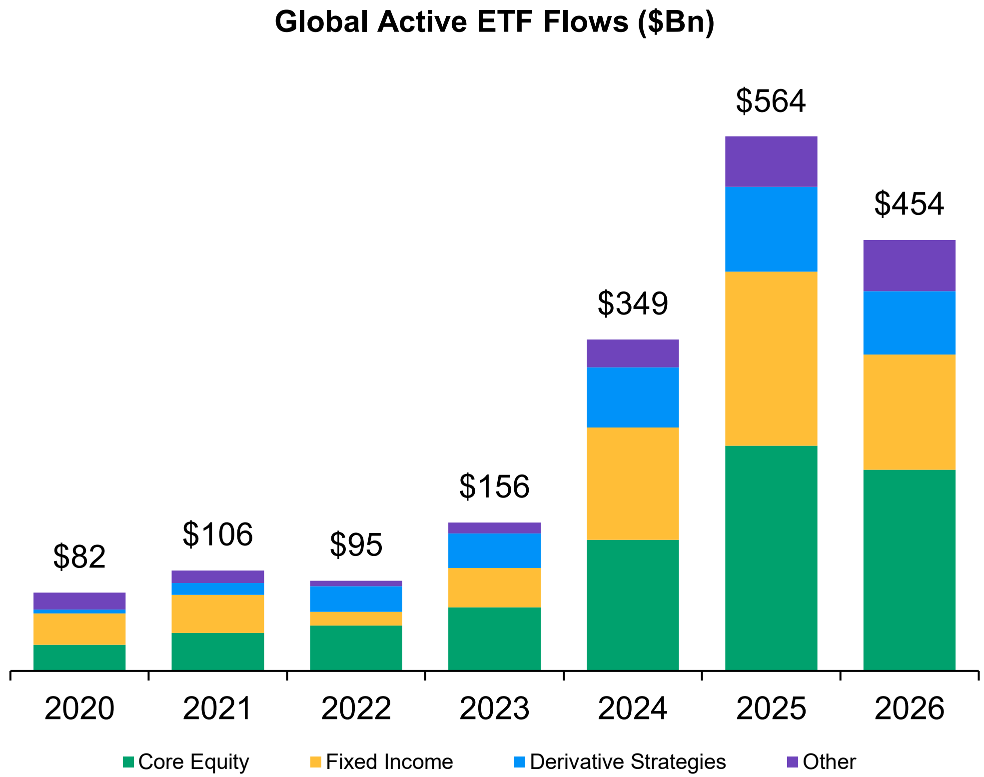
Source: Bloomberg, J.P. Morgan Asset Management. Active ETFs are determined by non-index funds. UCITS ETFs as defined by Bloomberg. Global consists of Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, Finland, France, Germany, Guernsey, Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Israel, Japan, Luxembourg, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Saudia Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UAE, United States and Vietnam.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Core and derivative allocations are driving active flows

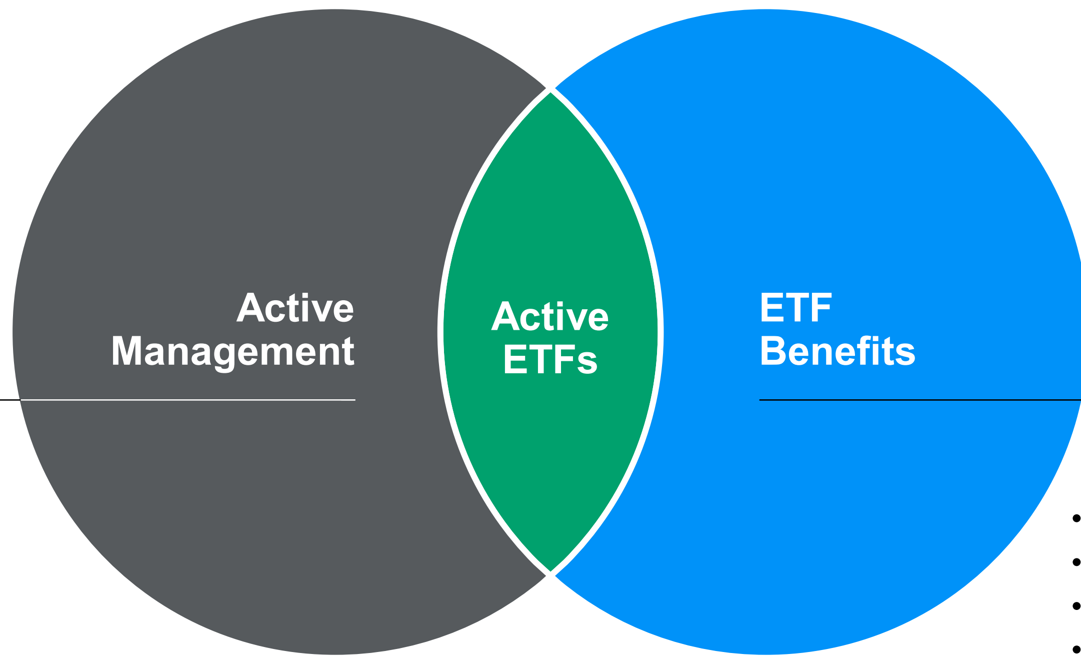




Source: Bloomberg, Morningstar, J.P. Morgan Asset Management.
Guide to ETFs – EMEA. Data as of 31 May 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Active management in an ETF structure



- Research
- Security selection
- Portfolio construction

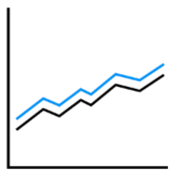
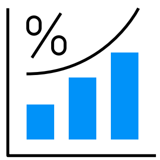
- Daily transparency
- Intraday liquidity
- Cost effective
- Accessible
- Portfolio efficiencies

Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

A growing universe of active ETFs

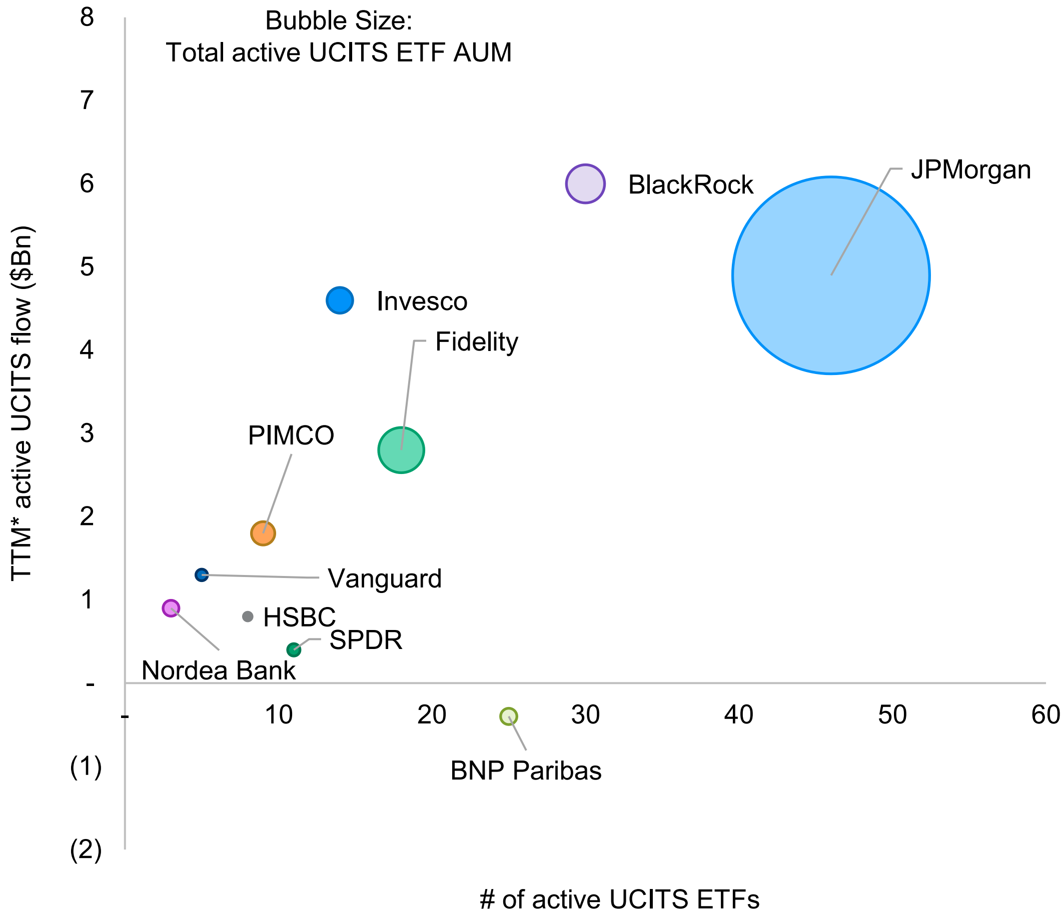
	Type of Active ETF	Investor Use Cases
	**Index-aware active** • Active ETFs that seek modest outperformance within a controlled tracking error budget • Lower tracking error and lower alpha	• Building blocks for core allocations • A step out of passive exposure within a tracking error budget
	**Higher alpha active** • Active ETFs that seek to achieve outperformance by taking larger, more active positions • Higher tracking error and higher alpha	• Building blocks for core allocations with higher target alpha and tracking error • Exposure to specific styles or factors (e.g. growth)
	**Outcome-oriented active** • Active ETFs that seek to achieve specific investment goals, such as income generation or downside protection, rather than simply outperforming a benchmark • These strategies typically use options to deliver targeted outcomes	• Building blocks for income portfolios • Exposure to a market with downside protection

Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Key players in the active UCITS ETF space

Top 10 active UCITS ETF issuers by AUM



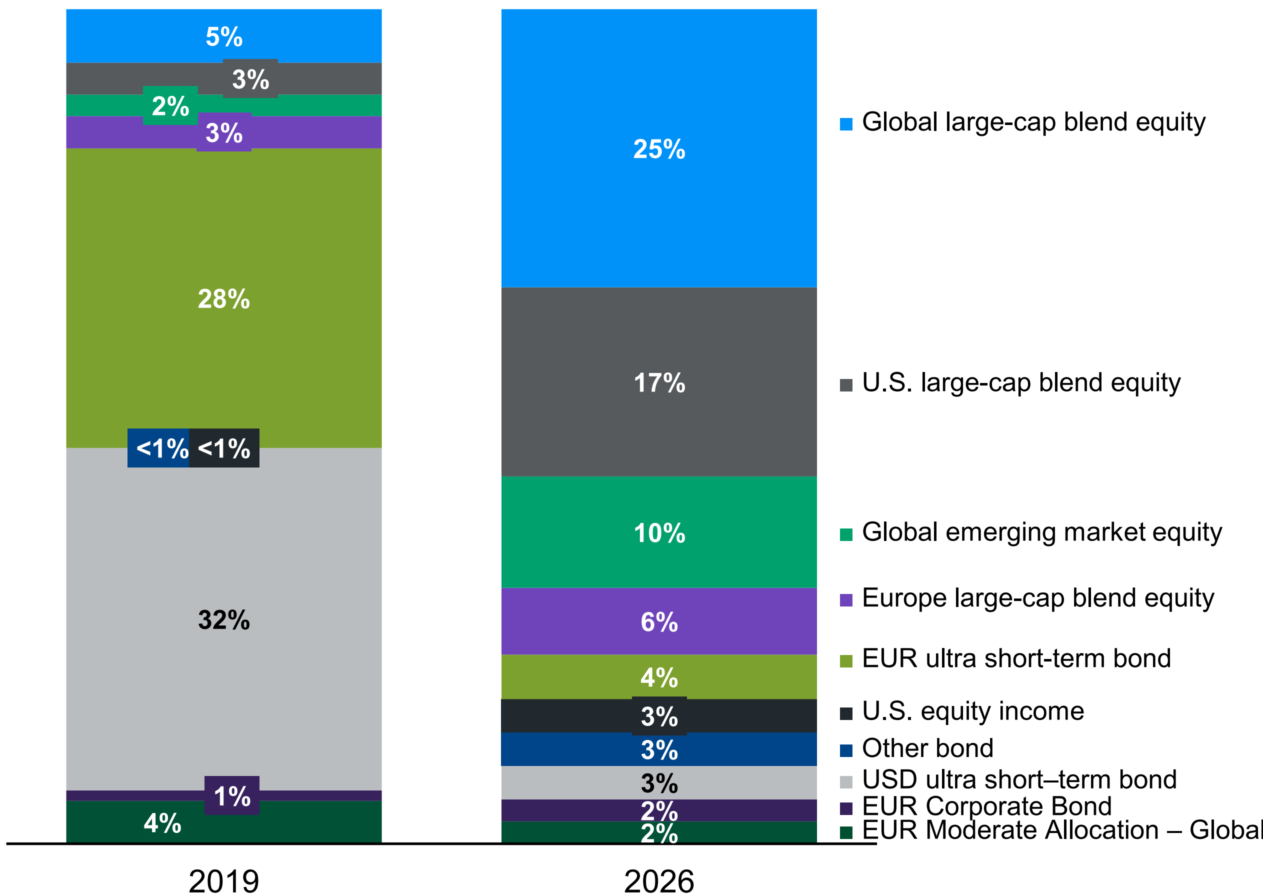
	Active UCITS ETF AUM ($Bn)	TTM* active UCITS ETF flow ($Bn)	# of active UCITS ETFs
JPMorgan	51.0	4.9	46
Fidelity	12.1	2.8	18
BlackRock	10.3	6.0	30
Invesco	7.1	4.6	14
PIMCO	6.5	1.8	9
BNP Paribas	4.7	-0.4	25
Nordea Bank	4.6	0.9	3
SPDR	3.7	0.4	11
Vanguard	3.5	1.3	5
HSBC	2.9	0.8	8
Active Total	**134.3**	**36.9**	**367**

Source: Bloomberg, J.P. Morgan Asset Management. *Trailing twelve months (TTM). AUM and product count include only active UCITS ETFs, as defined by Bloomberg, excluding money market and fund of funds.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Growth trends within the active UCITS ETF market

Top 10 active AUM Morningstar categories



AUM	2019	2026
Select categories	$10.2Bn	$100.1Bn
Active ETF total	$12.9Bn	$134.3Bn

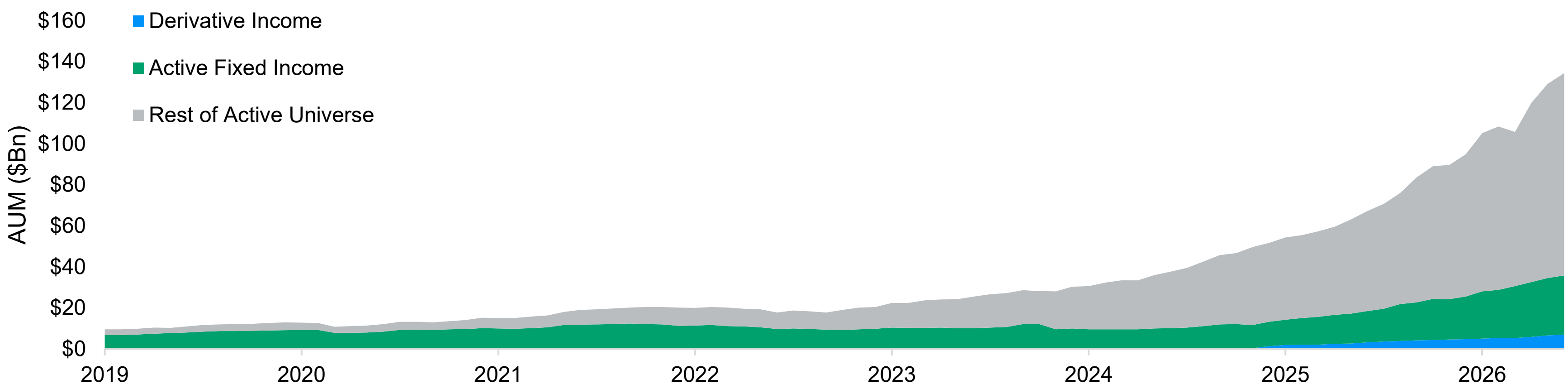
Source: Bloomberg, Morningstar, J.P. Morgan Asset Management. UCITS ETFs only as defined by Bloomberg. Category AUM percentages are percentages of overall active AUM and total percentages will likely not sum to 100% given not all active categories are represented in the chart. *Guide to ETFs – EMEA*. Data as 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

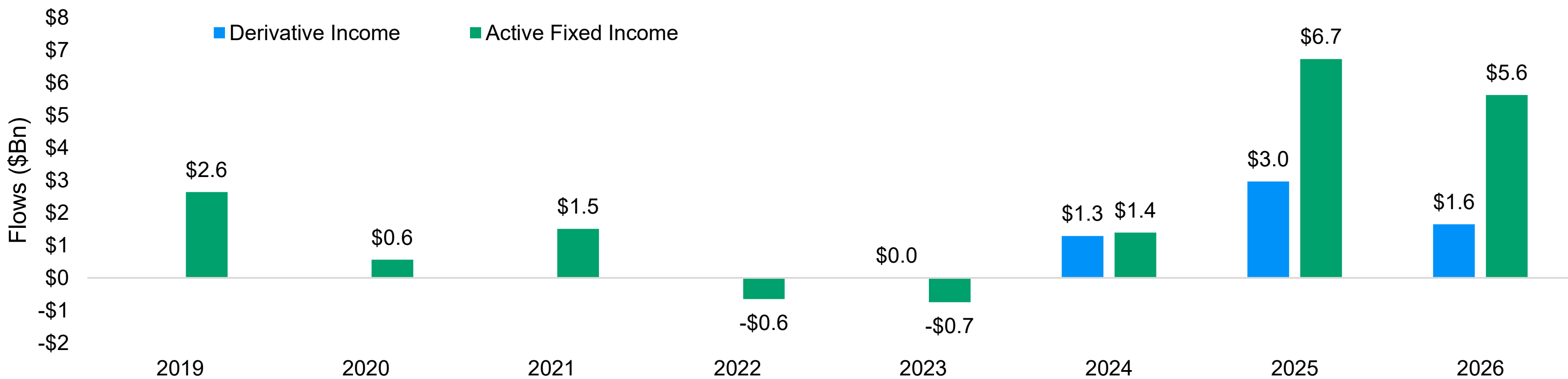
J.P.Morgan
ASSET MANAGEMENT

Active management for income

Income across the active UCITS ETF universe



Investors are using active management to navigate a complex income landscape

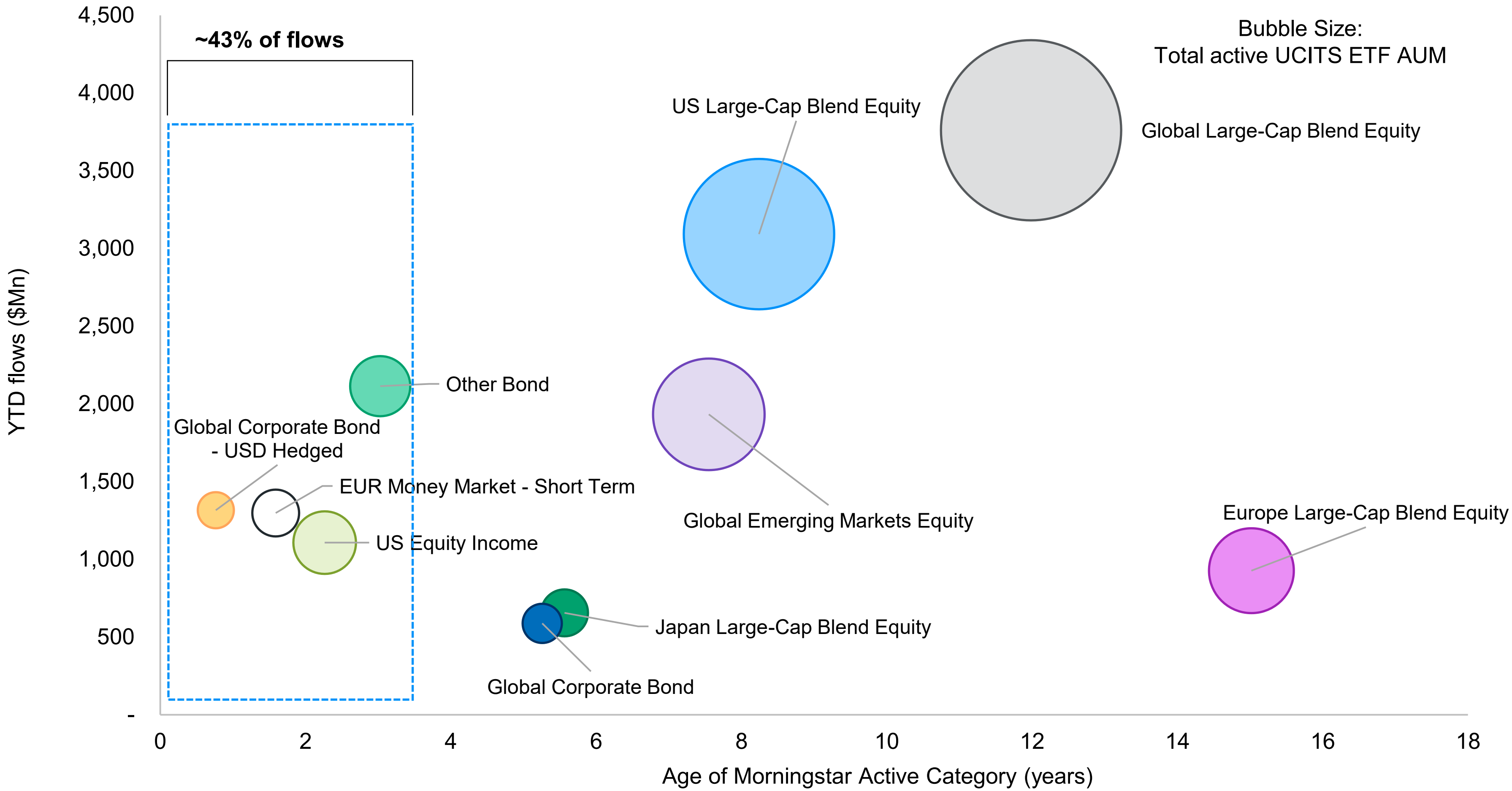


Source: Bloomberg, J.P. Morgan Asset Management. Includes UCITS ETFS only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Top 10 active UCITS ETF categories, by flows

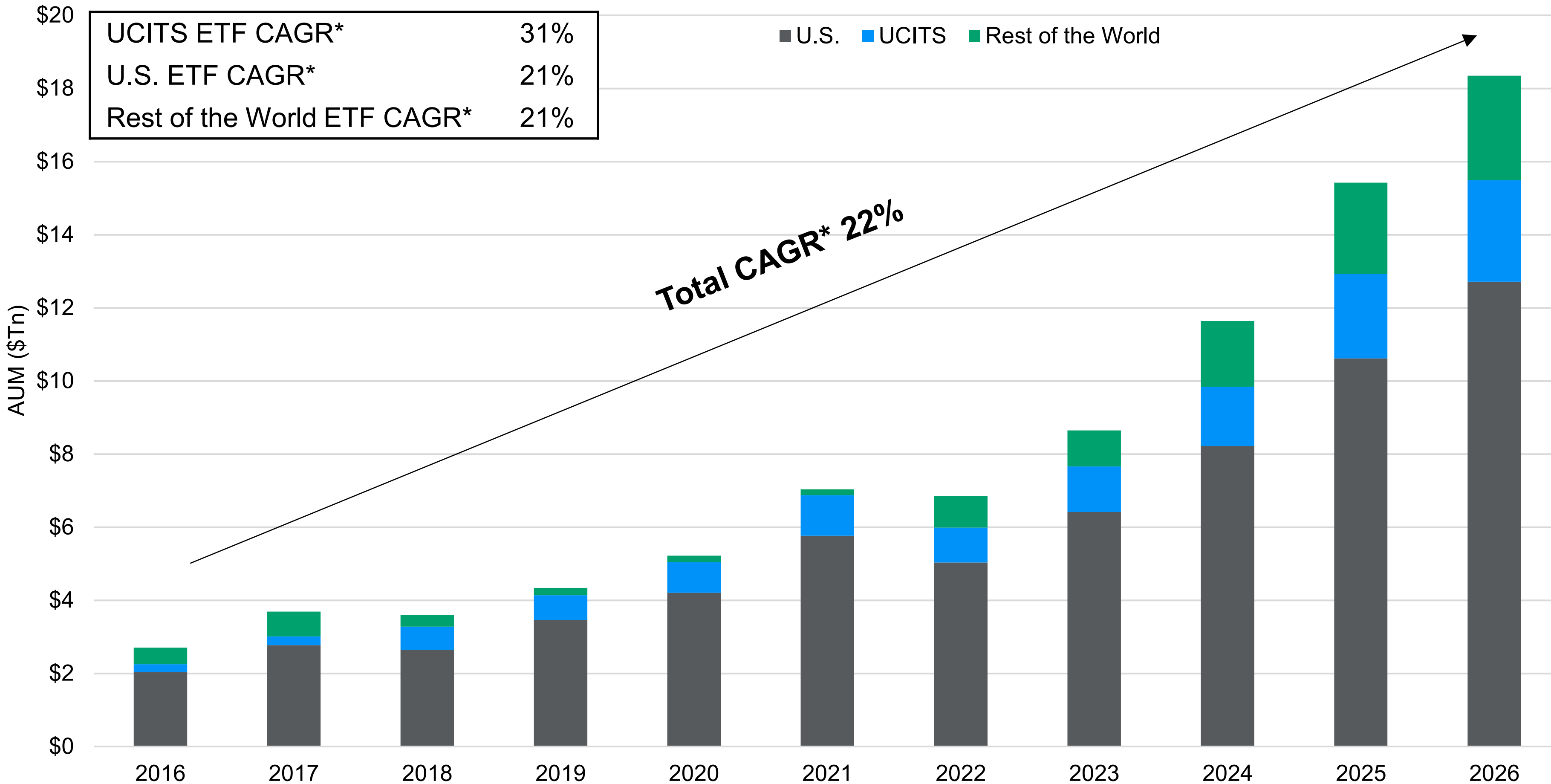
4 out of top 10 active categories by flows in 2026 were introduced less than 3 years ago



Source: Bloomberg, J.P. Morgan Asset Management. UCITS ETFs only as defined by Bloomberg. Age of Morningstar Active Category is calculated using the oldest inception date of the ETF in each category.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Global equity ETF AUM

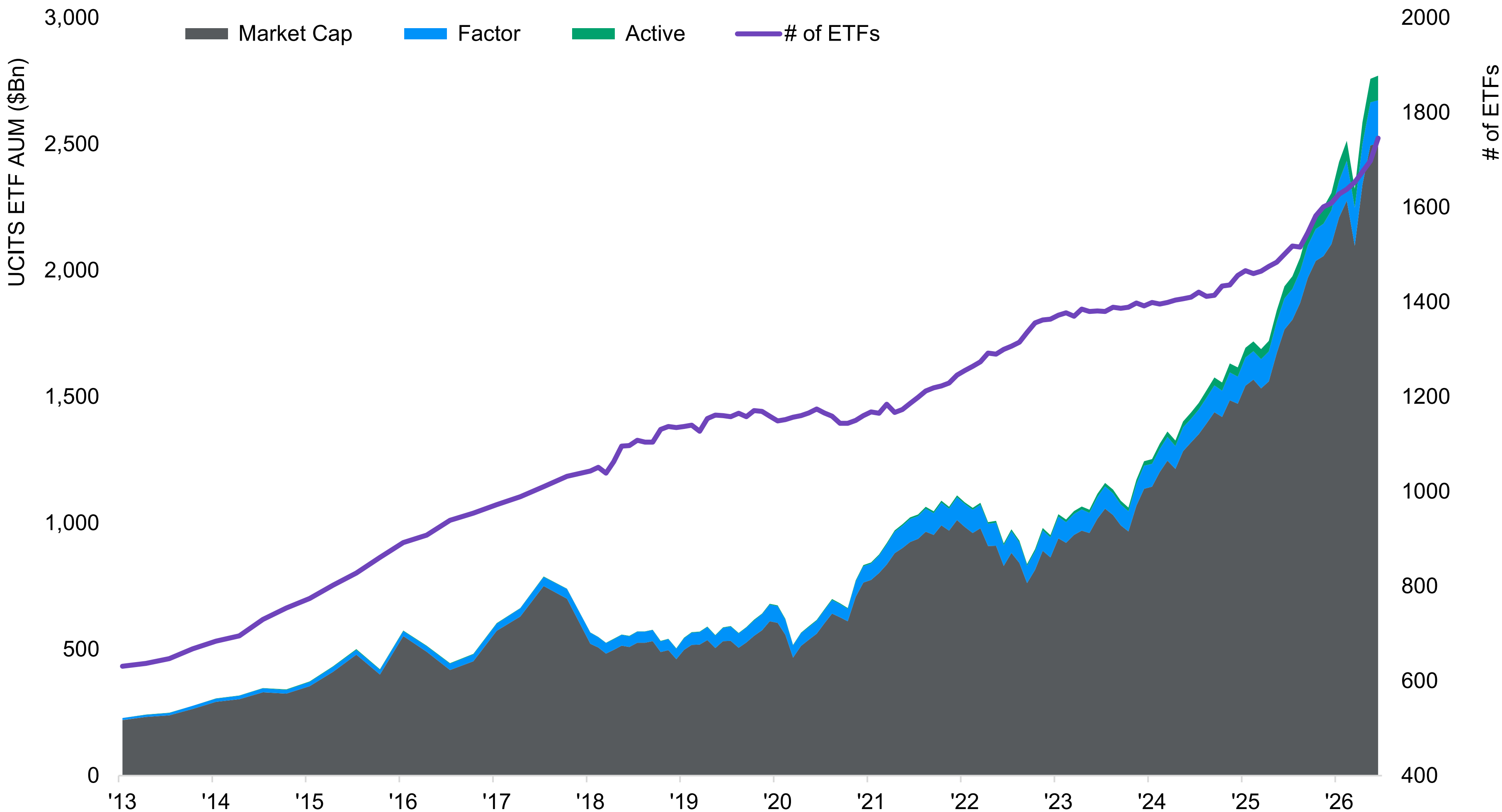


Source: Bloomberg, J.P. Morgan Asset Management. UCITS ETFs as defined by Bloomberg. Rest of the world consists of Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, Guernsey, Hong Kong, Hungary, India, Indonesia, Israel, Japan, Malaysia, Mauritius, Mexico New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Saudia Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, UAE, Vietnam, and non-UCITS ETFs in France, Germany, Ireland, Luxembourg, Sweden, Switzerland and the United Kingdom. *Compound annual growth rate (CAGR).
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Equity UCITS ETFs AUM and products

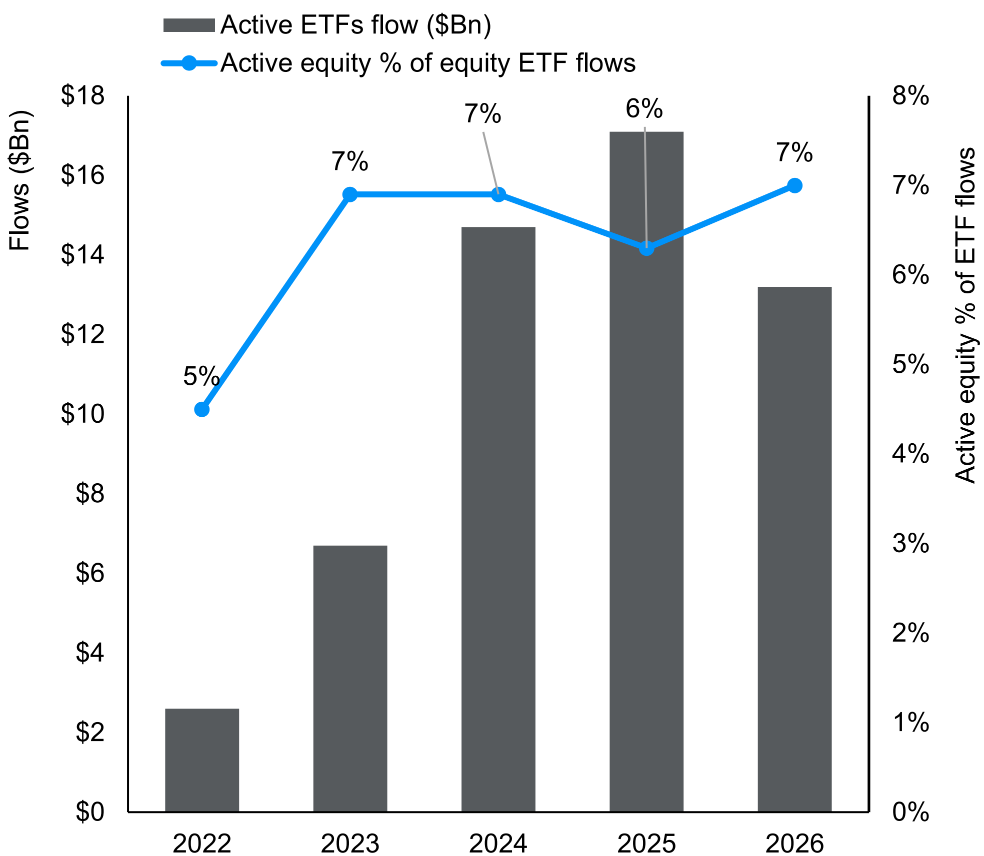


Source: Bloomberg, J.P. Morgan Asset Management. Includes only UCITS ETFs as defined by Bloomberg.
Guide to ETFs – EMEA. Data as 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Active UCITS equity ETF flows

Active UCITS equity ETF flows



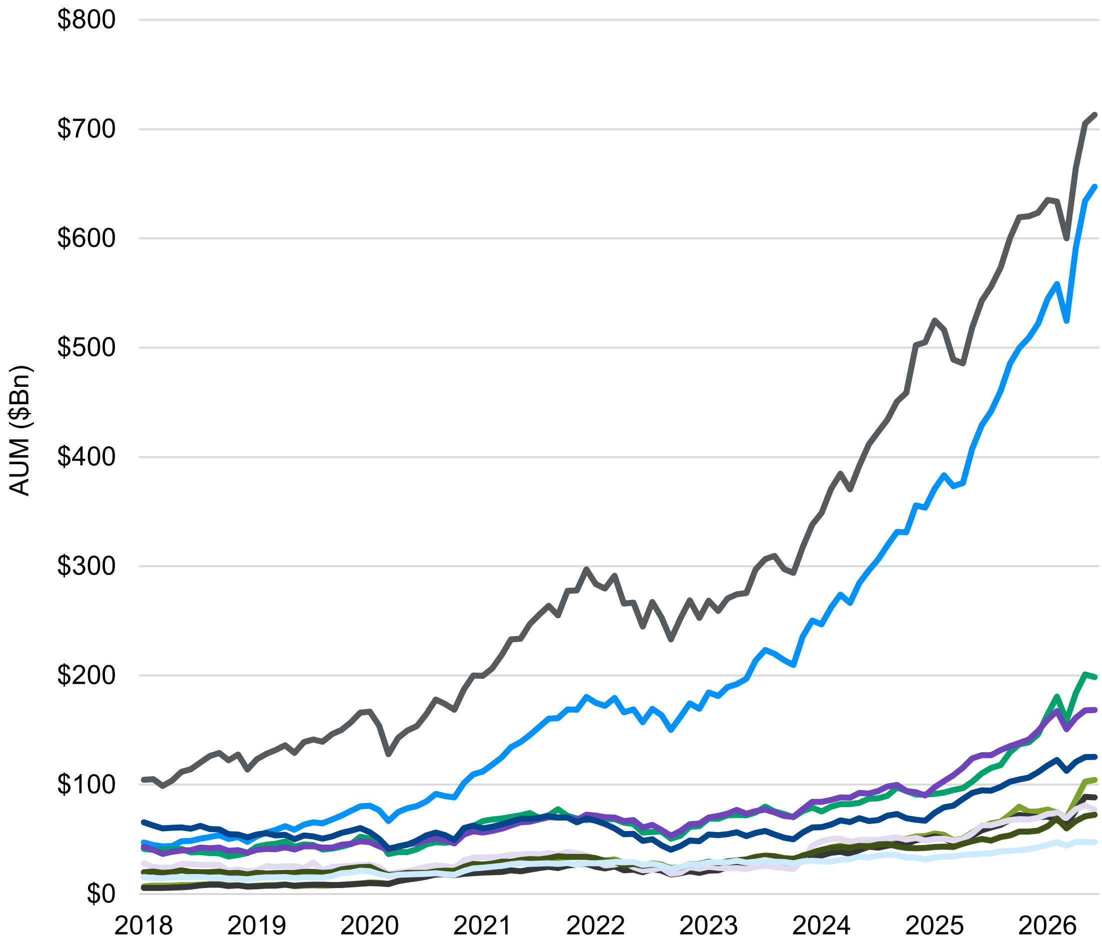
Industry flows by category ($Mn)

Category	YTD flow	% of flows YTD	AUM
Global Large-Cap Blend Equity	3,761	29%	33,563
US Large-Cap Blend Equity	3,093	24%	23,459
Global Emerging Markets Equity	1,933	15%	13,008
US Equity Income	1,108	8%	4,193
Europe Large-Cap Blend Equity	927	7%	7,593
Japan Large-Cap Blend Equity	656	5%	2,397
Global Small/Mid-Cap Equity	475	4%	1,853
Global Equity Income	453	3%	2,165
Sector Equity Technology	226	2%	944
Sector Equity Utilities	114	1%	270

Source: Bloomberg, J.P. Morgan Asset Management.
Guide to ETFs – EMEA. Data as 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution

Equity UCITS ETFs AUM by category



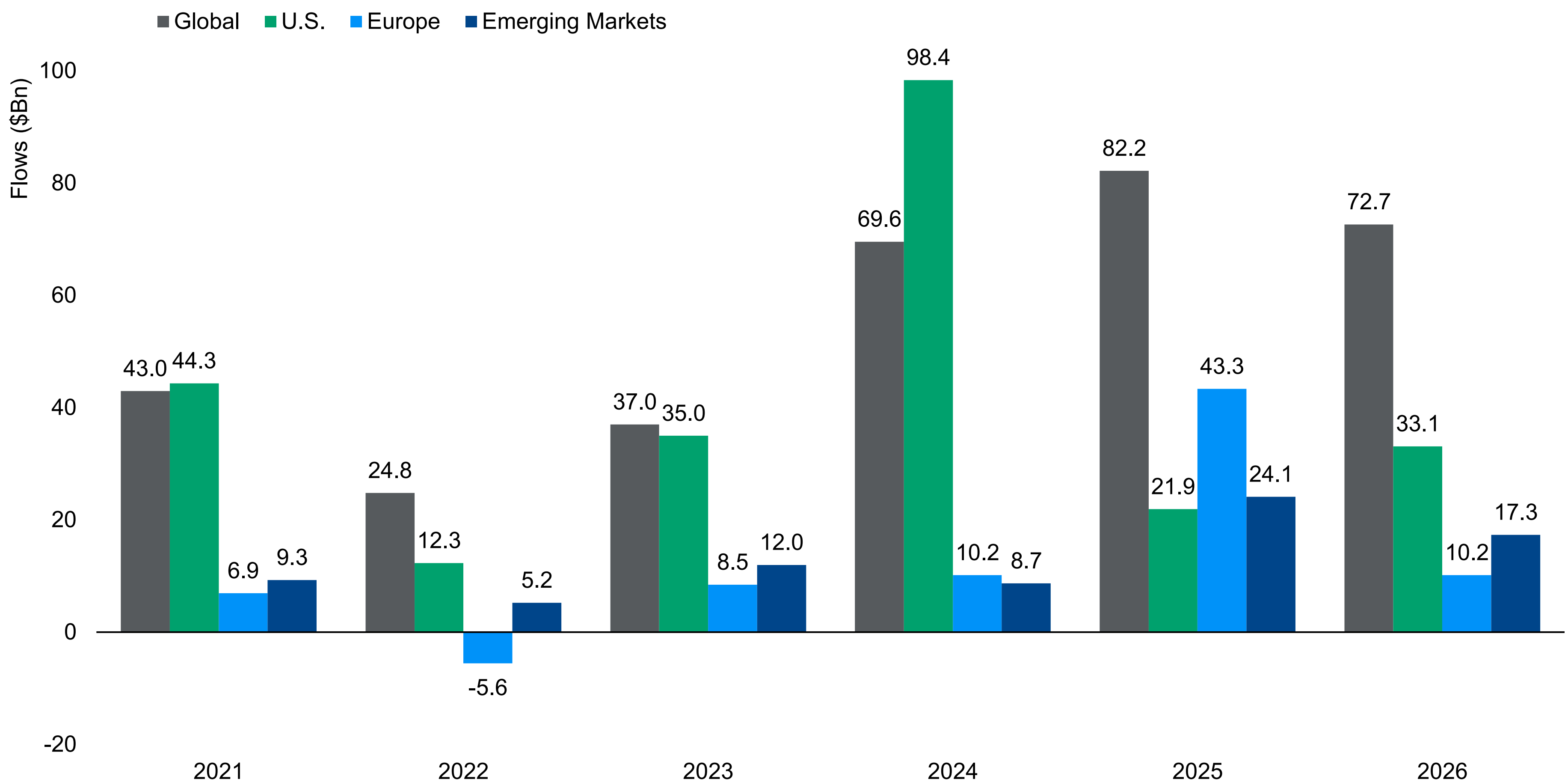
Category	AUM ($Bn)	TTM* Flows ($Bn)
US Large-Cap Blend Equity	713.1	49.6
Global Large-Cap Blend Equity	645.1	111.3
Global Emerging Markets Equity	198.6	32.1
Europe Large-Cap Blend Equity	168.4	14.9
Eurozone Large-Cap Equity	125.5	10.3
Sector Equity Technology	104.3	13.1
US Large-Cap Growth Equity	88.3	9.1
Other Equity	77.1	2.7
Japan Large-Cap Blend Equity	72.5	6.2
UK Large-Cap Equity	47.4	3.7

Source: Bloomberg, J.P. Morgan Asset Management. Includes only UCITS ETFs as defined by Bloomberg. *Trailing twelve months (TTM)
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Equity region UCITS ETF flows



Source: Bloomberg, J.P. Morgan Asset Management. % represents percentage of flows into the specific region for that year from the select group. Europe includes the M* categories: Europe Flex-Cap Equity, Europe Large-Cap Blend Equity, Europe Large-Cap Growth Equity, Europe Large-Cap Value Equity, Europe Mid-Cap Equity, Europe Small-Cap Equity, Eurozone Flex-Cap Equity, Eurozone Large-Cap Equity, Eurozone Mid-Cap Equity, Eurozone Small-Cap Equity. Global includes the M* categories: Global Flex-Cap Equity, Global Large-Cap Blend Equity, Global Large-Cap Growth Equity, Global Large-Cap Value Equity, Global Small Cap Equity. U.S. includes US Flex-Cap Equity, US Large-Cap Blend Equity, US Large-Cap Growth Equity, US Large-Cap Value Equity, US Mid-Cap Equity, US Small-Cap Equity. Emerging Markets includes M* categories: Global Emerging Markets Equity, Global Emerging Markets Small/Mid Cap Equity, Global Emerging Markets ex-China Equity.
Guide to ETFs – EMEA. Data as 30 June 2026.

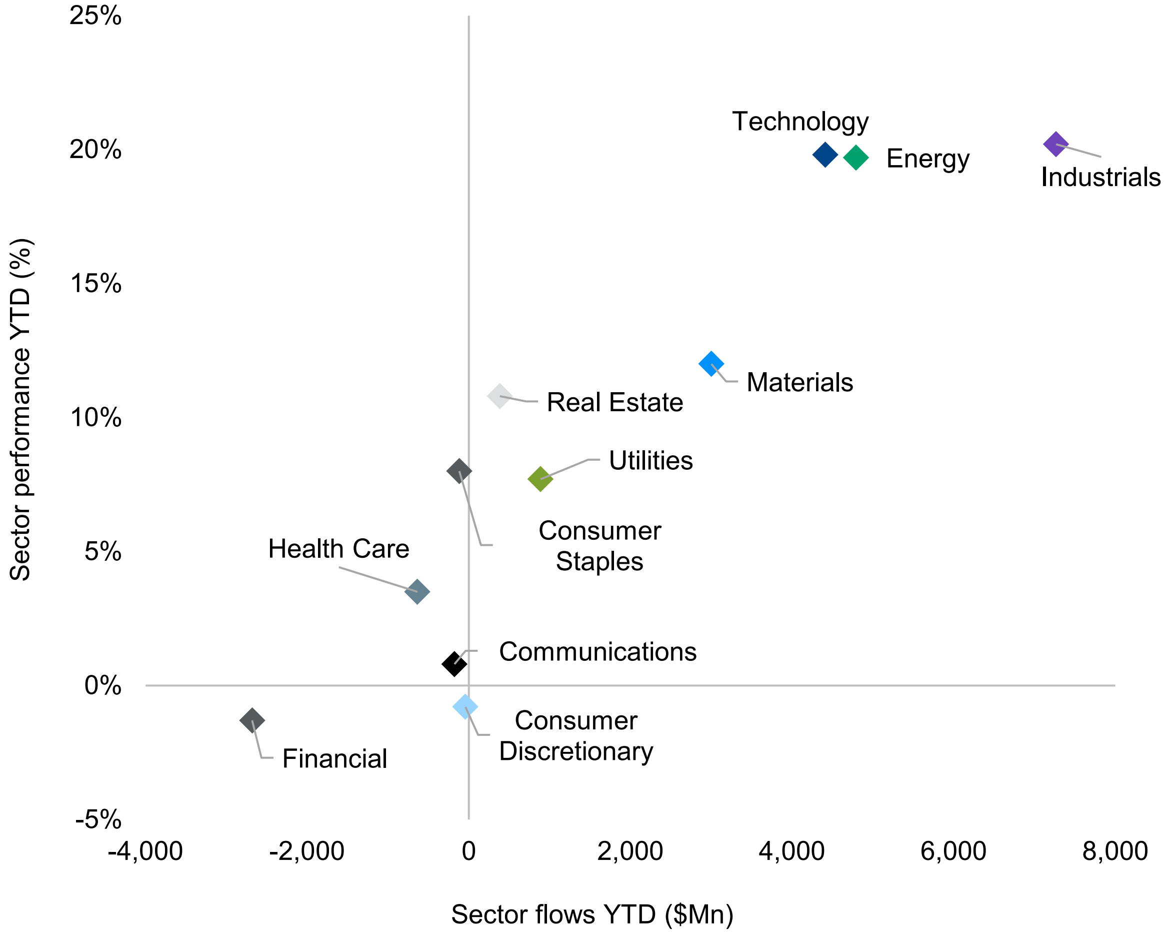
For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

Equities

UCITS ETF sector flows and performance

Industrial and technology flows have surged amid mixed performance



Industry flows by sector ($Mn)

Sector	YTD Performance	YTD Flows	TTM* Flows
Industrials	20.2%	7,267	9,889
Energy	19.7%	4,792	5,986
Technology	19.8%	4,411	9,841
Materials	12.0%	3,001	6,461
Utilities	7.7%	888	1,478
Real Estate	10.8%	384	339
Consumer Discretionary	-0.8%	(42)	(295)
Consumer Staples	8.0%	(118)	(209)
Communications	0.8%	(178)	(87)
Health Care	3.5%	(637)	1,604
Financial	-1.3%	(2,682)	3,093

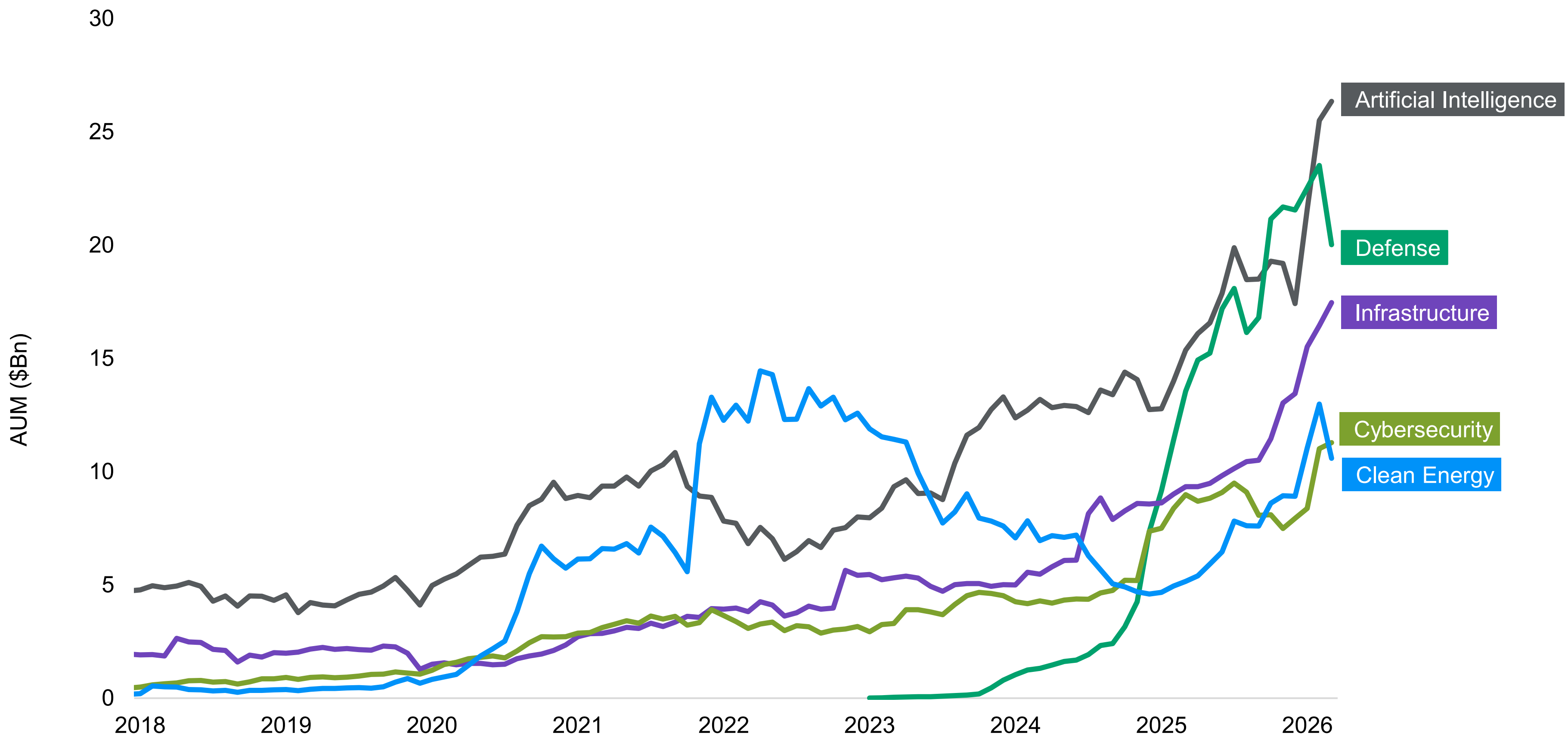
Source: Bloomberg, J.P. Morgan Asset Management. *Trailing twelve months (TTM). Sector performance is calculated using the MSCI World Sector indices.
Guide to ETFs – EMEA. Data as of 30 June 2026.

J.P.Morgan ASSET MANAGEMENT

Equities

Thematic UCITS ETF AUM

Top 5 themes by AUM



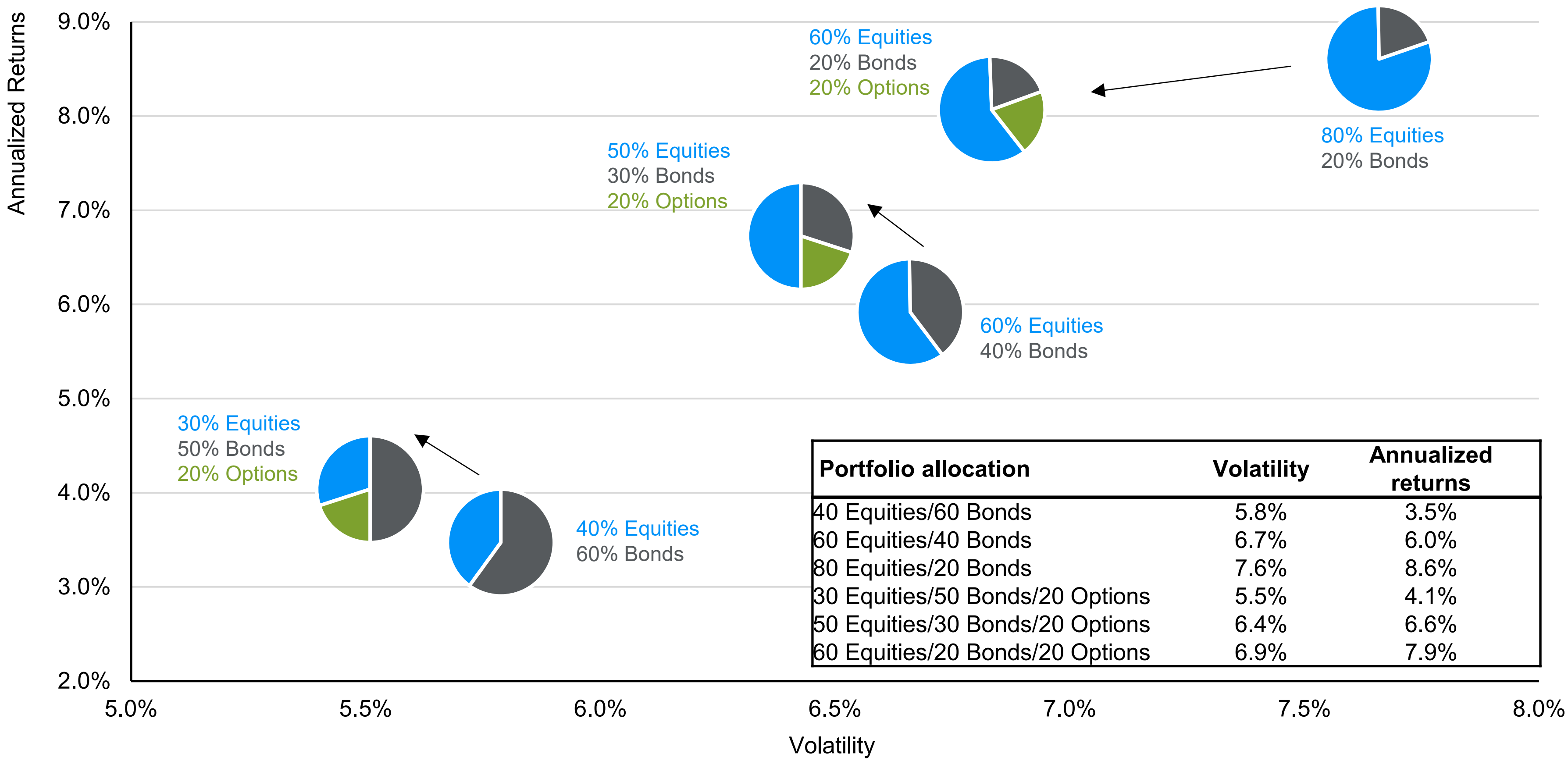
Source: Bloomberg, J.P. Morgan Asset Management. Includes UCITS ETFs only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Diversification with options strategies

Options and portfolio risk/return
Annualised volatility and returns, June 2021- June 2026



Portfolio allocation	Volatility	Annualized returns
40 Equities/60 Bonds	5.8%	3.5%
60 Equities/40 Bonds	6.7%	6.0%
80 Equities/20 Bonds	7.6%	8.6%
30 Equities/50 Bonds/20 Options	5.5%	4.1%
50 Equities/30 Bonds/20 Options	6.4%	6.6%
60 Equities/20 Bonds/20 Options	6.9%	7.9%

Source: Bloomberg, J.P. Morgan Asset Management. Portfolios are rebalanced at the start of the year. Equities are represented by the ACWI Index, Bonds are represented by the Bloomberg Global Aggregate Index, Options are represented by a US based ETF, given the longer track record, that has historically had a beta of 0.6 over the represented period. Volatility is calculated as the annualized standard deviation of monthly returns. Past performance is not a reliable indicator of current and future results.
Guide to ETFs – EMEA. Data as of 30 June 2026.

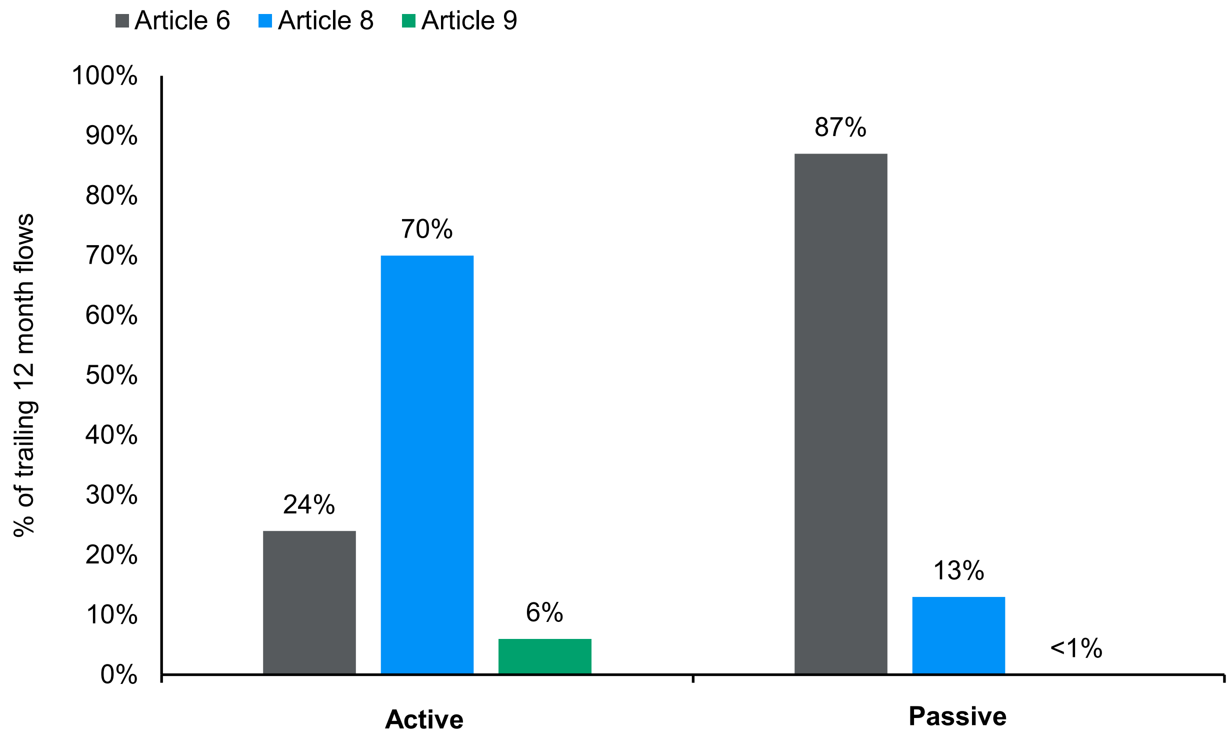
For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Equities

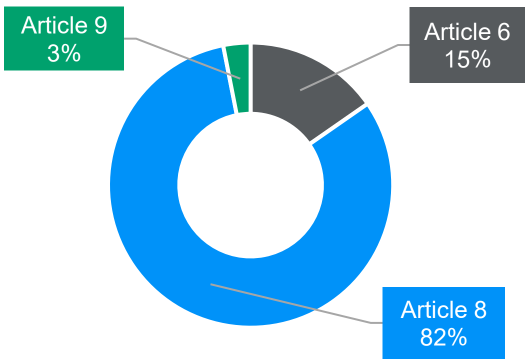
Equity UCITS ETF flows and AUM by EU SFDR* classification

Active and Passive flows by EU SFDR* classification

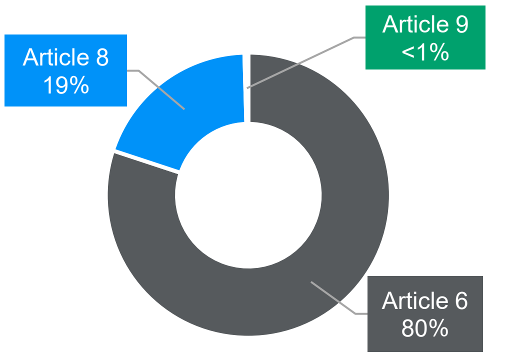


	Article 6	Article 8	Article 9
# of Active ETFs	65	110	7
# of Passive ETFs	909	533	55

Active Equity AUM



Passive Equity AUM

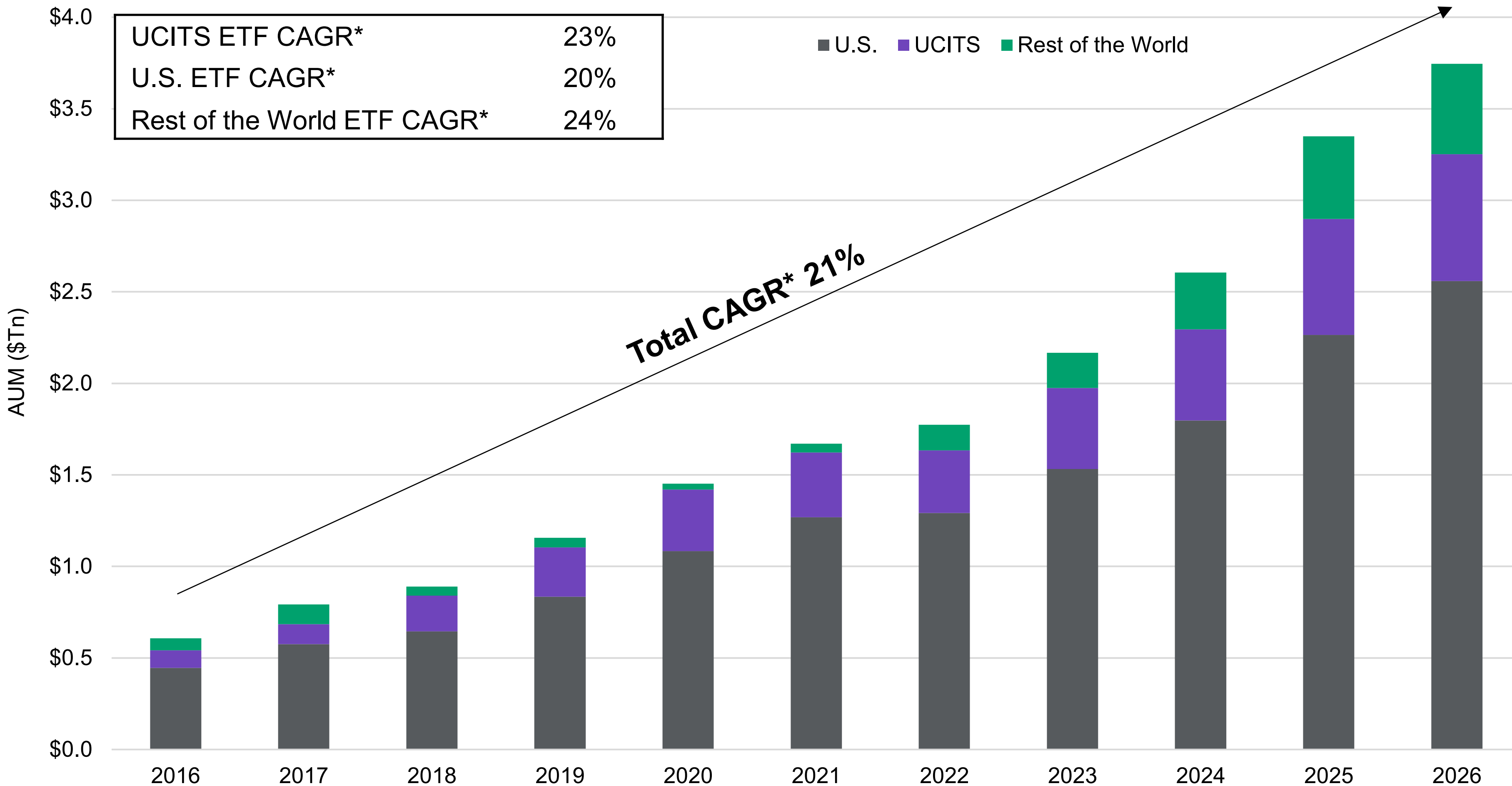


Source: Bloomberg, J.P. Morgan Asset Management. Includes only UCITS ETFs as defined by Bloomberg and grouped per Bloomberg SFDR classification. *Sustainable Finance Disclosure Regulation (SFDR). Article 6 are funds without a sustainability scope; Article 8 are funds that promote environmental or social objectives; Article 9 are funds that have sustainable investments as their objective.

Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Global fixed income ETF AUM

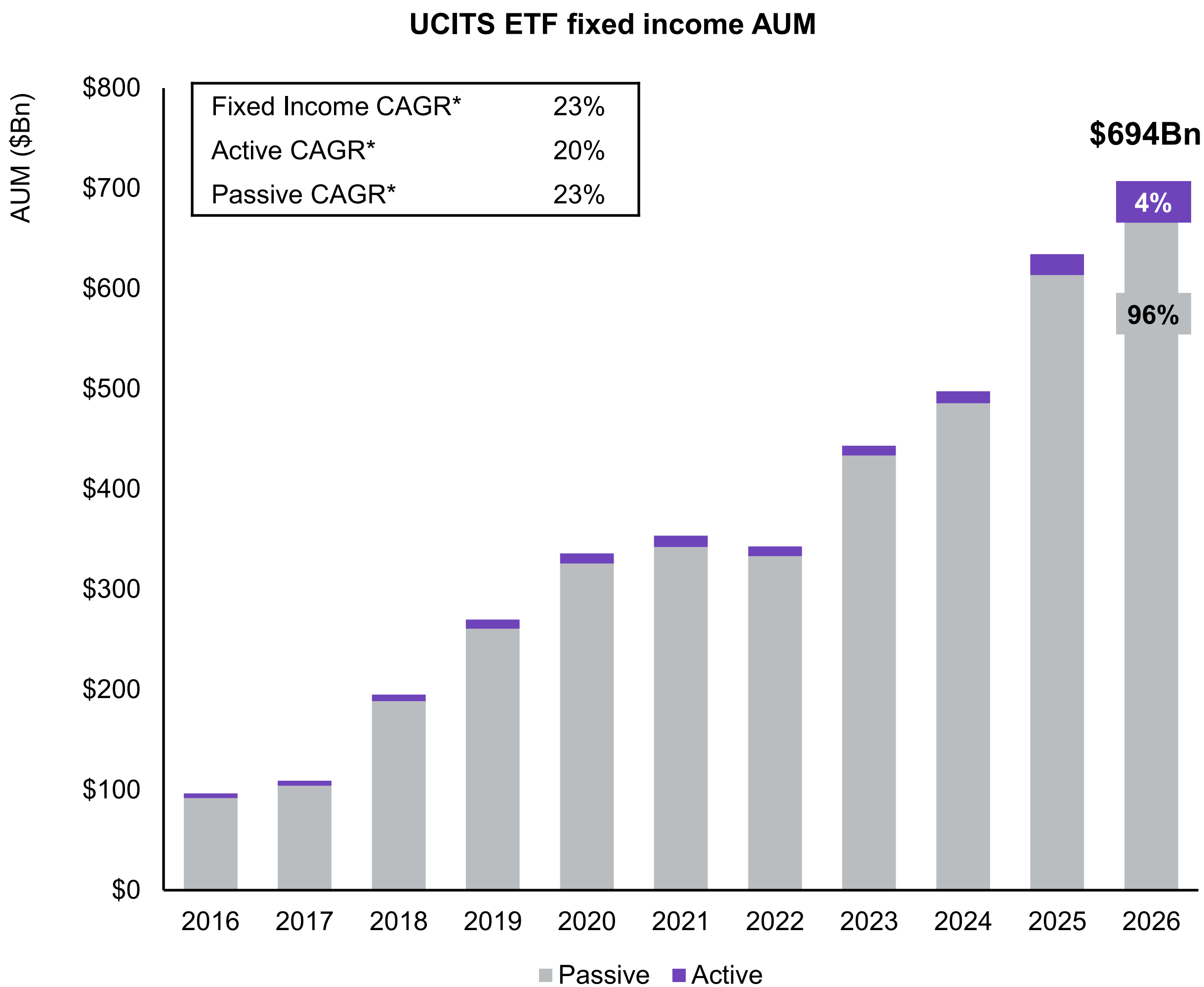


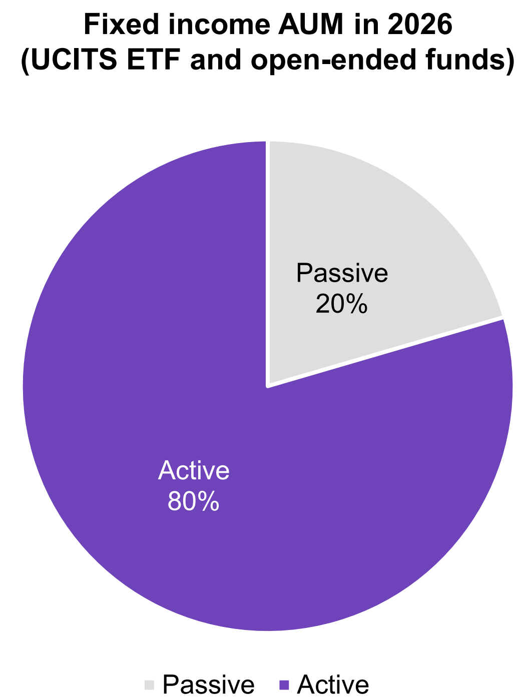
Source: Bloomberg, J.P. Morgan Asset Management. UCITS ETFs as defined by Bloomberg. Rest of the world consists of Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Egypt, Guernsey, Hong Kong, Hungary, India, Indonesia, Israel, Japan, Malaysia, Mauritius, Mexico New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Saudia Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, UAE, Vietnam, and non-UCITS ETFs in France, Germany, Ireland, Luxembourg, Sweden, Switzerland and the United Kingdom. *Compound annual growth rate (CAGR).
Guide to ETFs – EMEA. Data as 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

UCITS active fixed income across vehicles





Source: Bloomberg, Morningstar, J.P. Morgan Asset Management. UCITS ETFs as defined by Bloomberg. Right graph includes all UCITS open-ended funds and ETFs as of 31 May 2026. Passive funds includes funds defined as index funds per Morningstar. *Compound annual growth rate (CAGR). *Guide to ETFs – EMEA*. Data as of 30 June 2026.

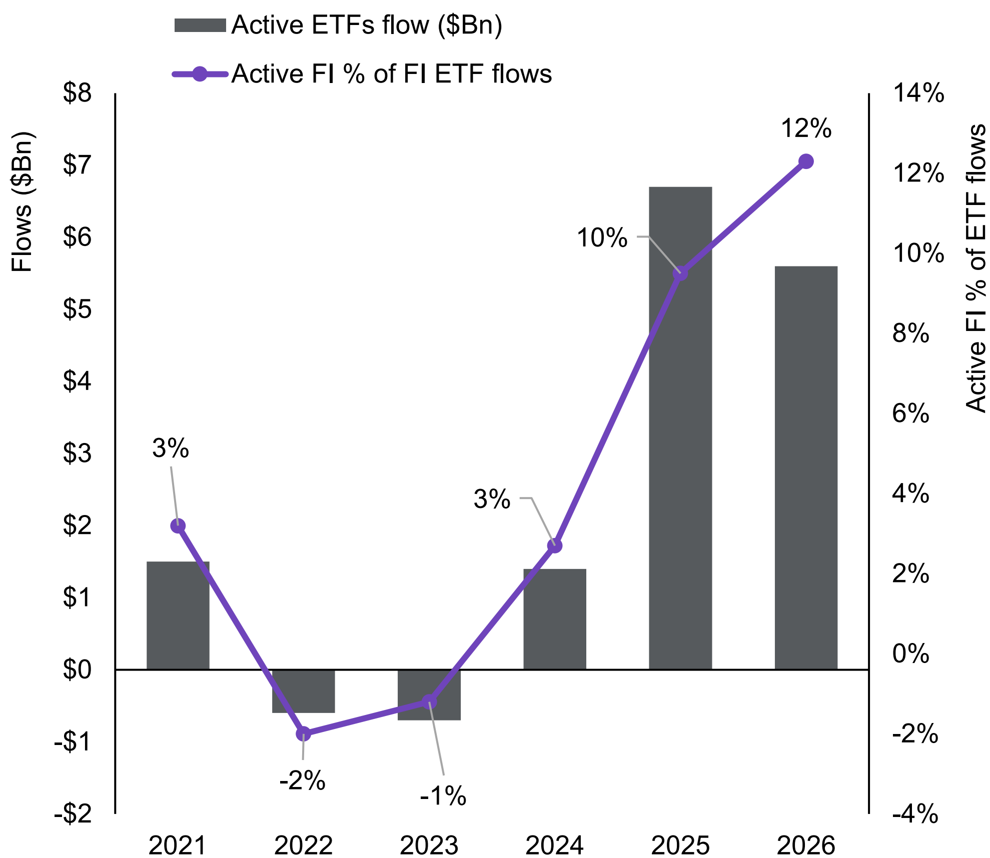
For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

Fixed Income

Active UCITS fixed income ETF flows

Active UCITS fixed income (FI) ETF flows



Industry flows by category ($Mn)

Category	YTD flow	% of flows YTD	AUM
Other Bond	2,114	38%	3,876
Global Corporate Bond - USD Hedged	1,316	23%	1,449
Global Corporate Bond	588	10%	1,697
Global Government Bond - USD Hedged	588	10%	605
EUR Corporate Bond	500	9%	3,026
EUR Government Bond	476	8%	1,322
Global Government Bond	457	8%	695
EUR Corporate Bond - Short Term	179	3%	615
EUR Flexible Bond	137	2%	340
Global High Yield Bond	135	2%	704

Source: Bloomberg, J.P. Morgan Asset Management.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

Larger investment universe for active ETFs in fixed income

49% of the $60 trillion U.S. bond market is not captured by the Bloomberg U.S. Aggregate Index

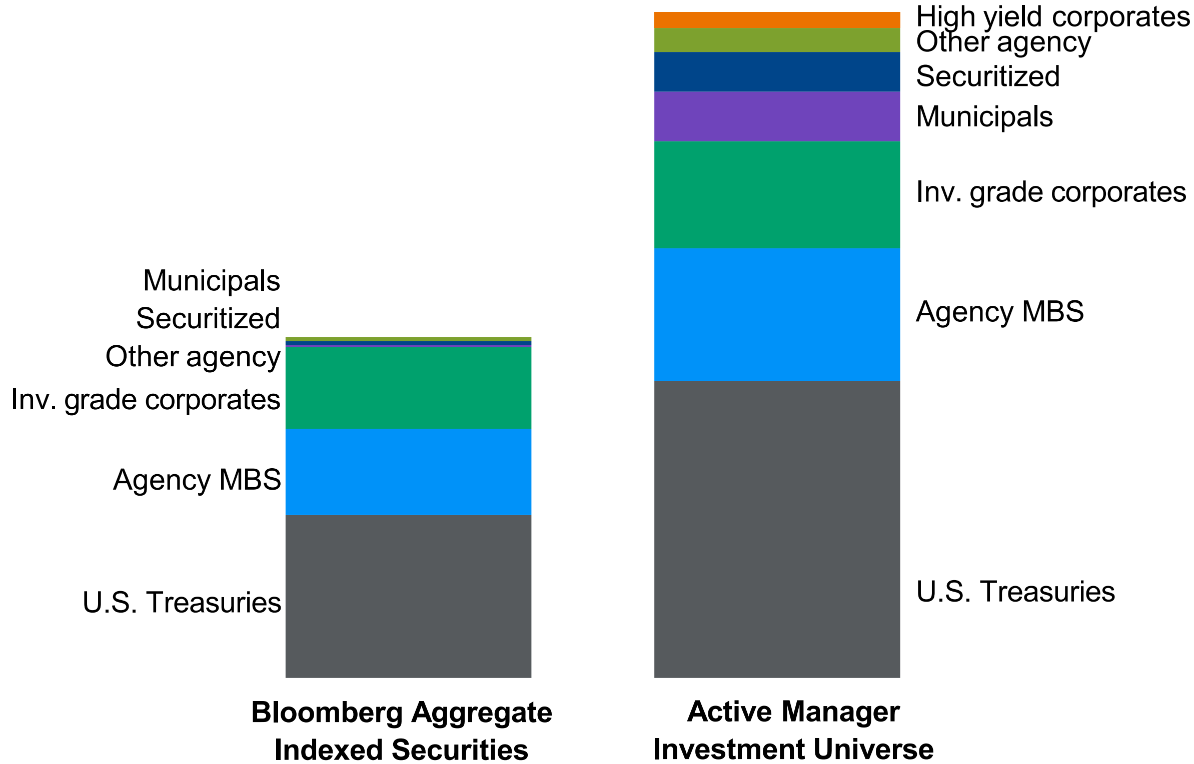
$145Tn
Global Fixed Income Market

3Mn
Unique Bonds

VS.

$125Tn
Global Equity Market

55K
securities



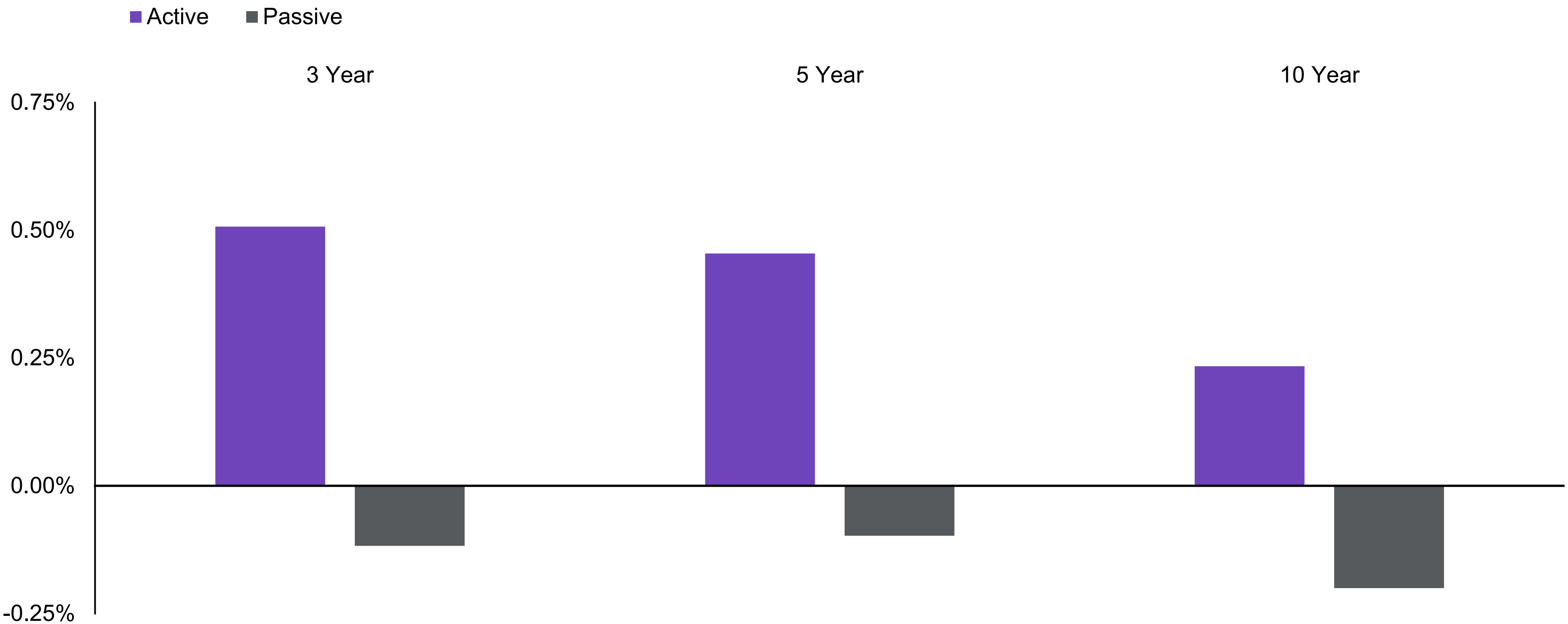
Source: Left- SIFMA as of July 28, 2025. World Federation of Exchanges as of July 2025. Right: Bank of America, Bloomberg, SIFMA, J.P. Asset Management as of July 2025.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

Active fixed income managers outperform their passive peers

Average excess annualised returns over the Bloomberg Global Aggregate Bond Index



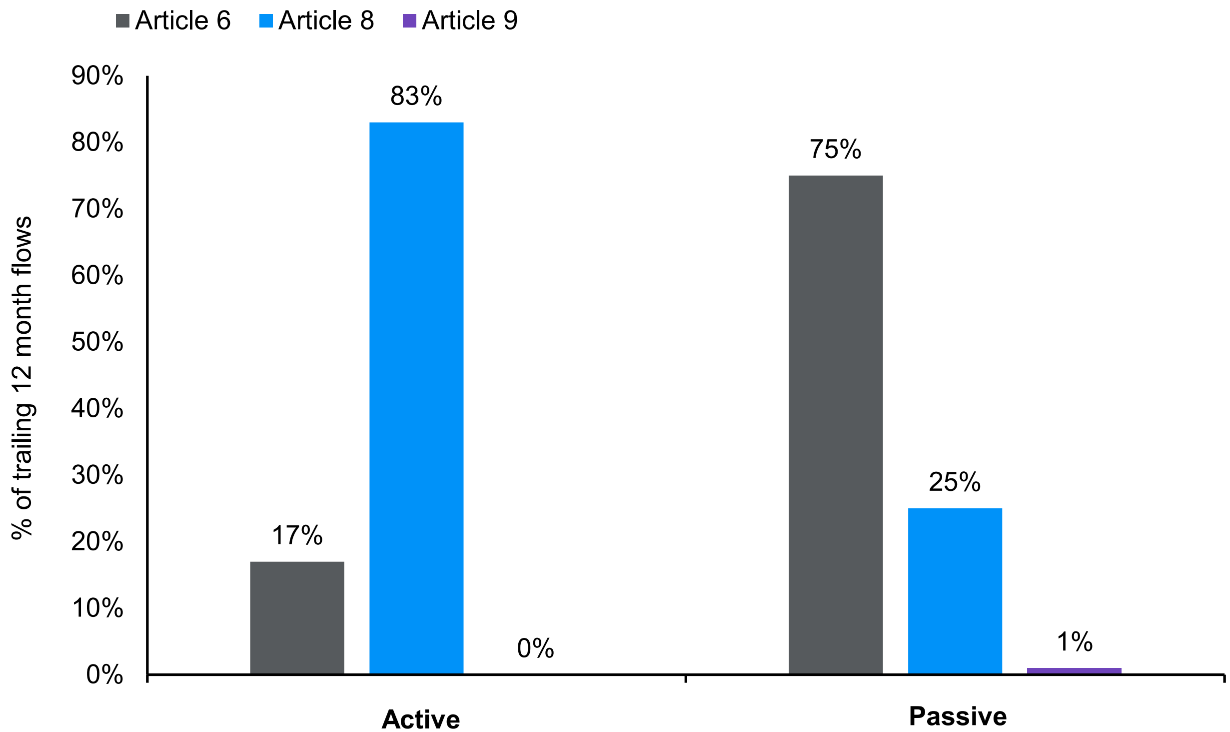
Source: Morningstar, J.P. Morgan Asset Management. Past performance is not a reliable indicator of current and future results. This information is for illustrative purposes only, does not reflect actual investment results, is not a guarantee of future results and is not a recommendation to buy or sell. The chart above reflects performance of all funds managed against Bloomberg Global Aggregate Index (LEGATRUU/LEGATRUH). Data as of 31 May 2026. The Bloomberg Global Aggregate Index is a flagship measure of global investment grade debt from a multitude local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

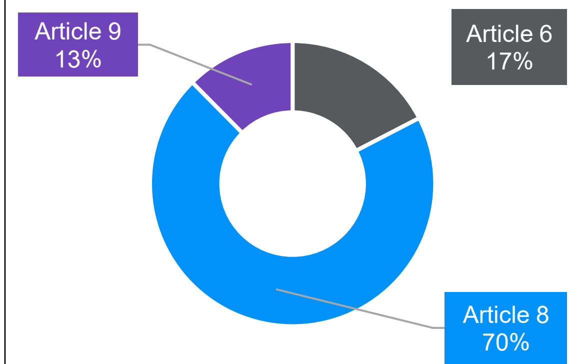
Fixed income UCITS ETF flows and AUM by EU SFDR* classification

Active and Passive flows by EU SFDR* classification

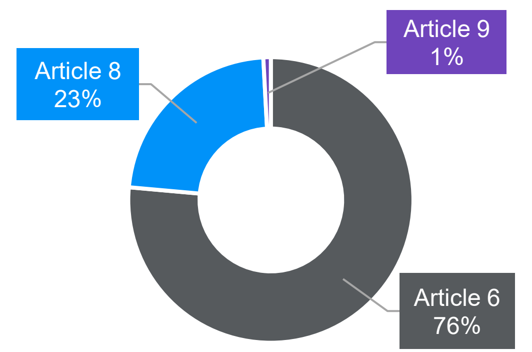


	Article 6	Article 8	Article 9
# of Active ETFs	26	78	11
# of Passive ETFs	349	188	16

Active Fixed Income AUM



Passive Fixed Income AUM



Source: Bloomberg, J.P. Morgan Asset Management. Includes only UCITS ETFs as defined by Bloomberg and grouped per Bloomberg SFDR classification. *Sustainable Finance Disclosure Regulation (SFDR). Article 6 are funds without a sustainability scope; Article 8 are funds that promote environmental or social objectives; Article 9 are funds that have sustainable investments as their objective.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

ETF characteristics and benefits

Transparent	• Daily holdings disclosure leads to more visibility of underlying securities, *better pricing during market stress* and *tighter spreads*
Liquid	• Exchange trading provides *intra day liquidity* • Constant bid/ask prices enhance *price discovery*, especially in illiquid market segments
Cost-effective	• One fee structure, lower expense ratios and operational innovations translates to *lower costs* for investors
Accessible	• Provides access to diverse asset classes that may or may not be easily available to all investors, whether active or passive, with *no minimum investment thresholds*
Portfolio efficiencies	• Secondary market activity assists in *lowering portfolio turnover* and allows managers to focus on their core expertise • In-kind redemptions capabilities may help *reduce trading activity*

Source: J.P. Morgan Asset Management. For illustrative purposes only. Investors must buy and sell units on a secondary market with the assistance of an intermediary (e.g. a stockbroker) and may incur fees for doing so. In addition, investors may pay more than the current net asset value when buying units and may receive less than the current net asset value when selling them. The tax treatment depends on the individual circumstances of each client and may be subject to change in the future.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Investment vehicle comparison

	ETF	Open-ended funds	Segregated accounts
Tradability	Throughout the day	At the end of the day	Can buy or sell assets directly through the management company, typically on a best-efforts basis
Fees	Expense ratio, plus spread cost	Expense ratio, plus swing costs (subject to manager thresholds)	Typically based on a percentage of account assets
Minimum Investment	No minimum	Subject to share class minimums	Typically higher minimums versus open-ended funds
Direct ownership of securities	No	No	Yes
Portfolio customization	No	No	Yes

Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as 30 June 2026.

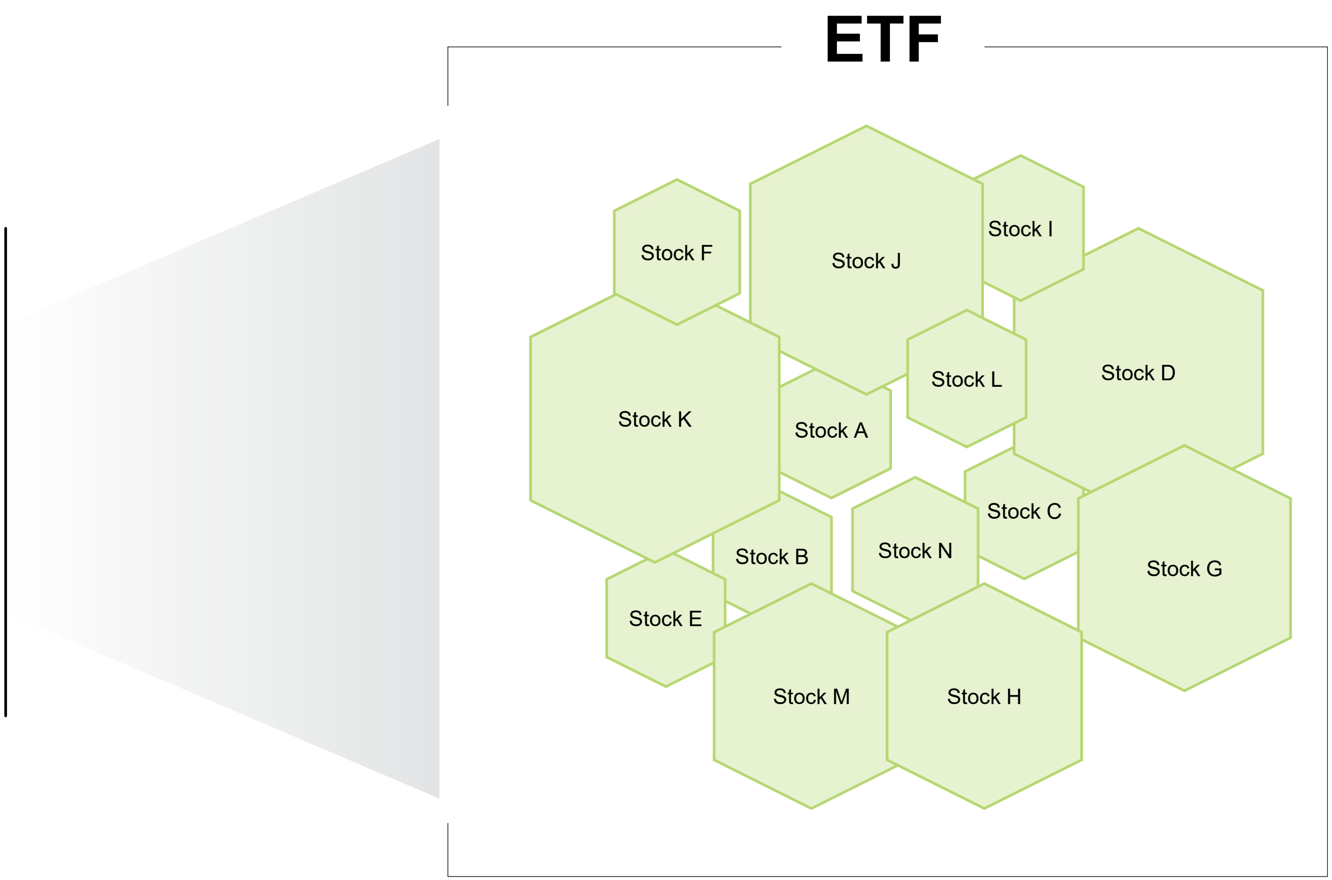
For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

ETF transparency allows investors to know what they own

ETF transparency allows:

- Better understanding of portfolio holdings/portfolio overlap
- Ability for daily performance attribution
- Tighter bid/offer spreads



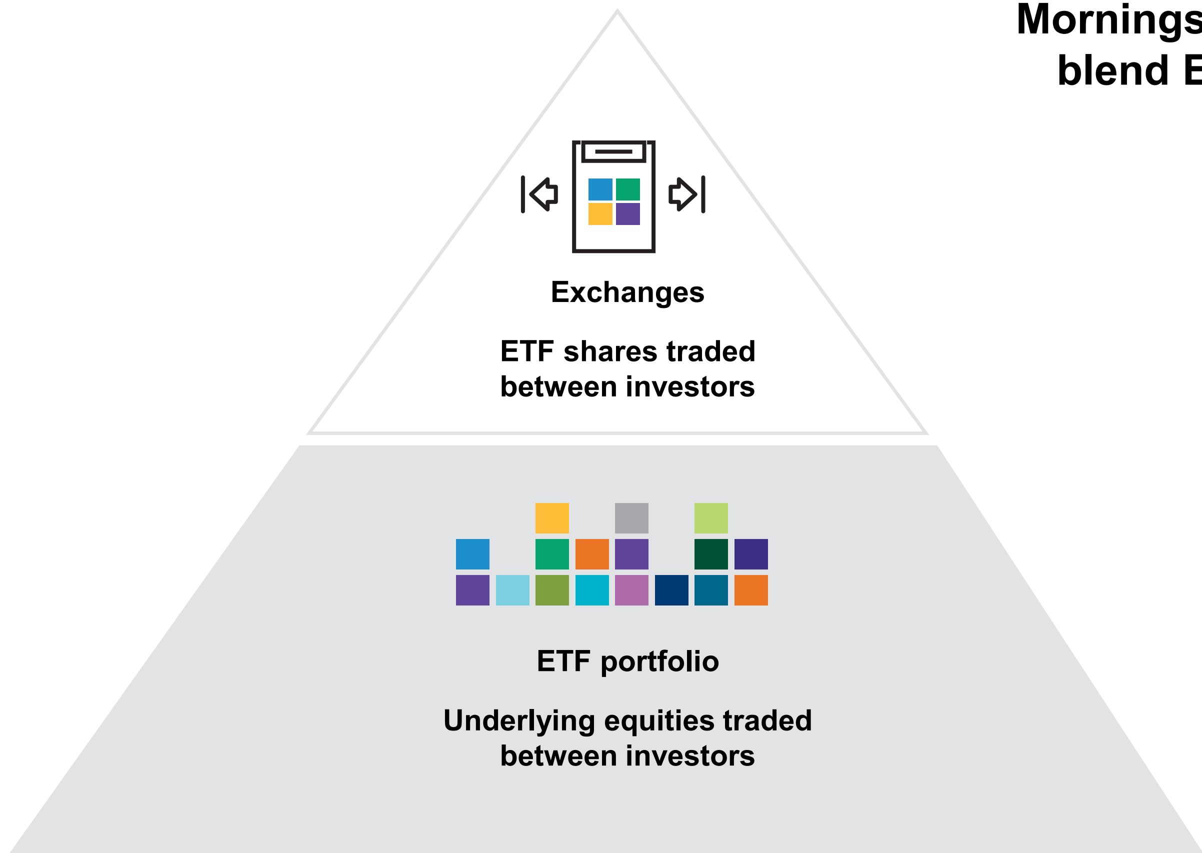
Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

ETF liquidity explained

ETFs offer more liquidity than what may be seen on exchanges



Morningstar U.S. active equity large cap blend ETF category (11 active ETFs)

Average daily trading volume

$130Mn

+

Average daily trading volume

$300Bn

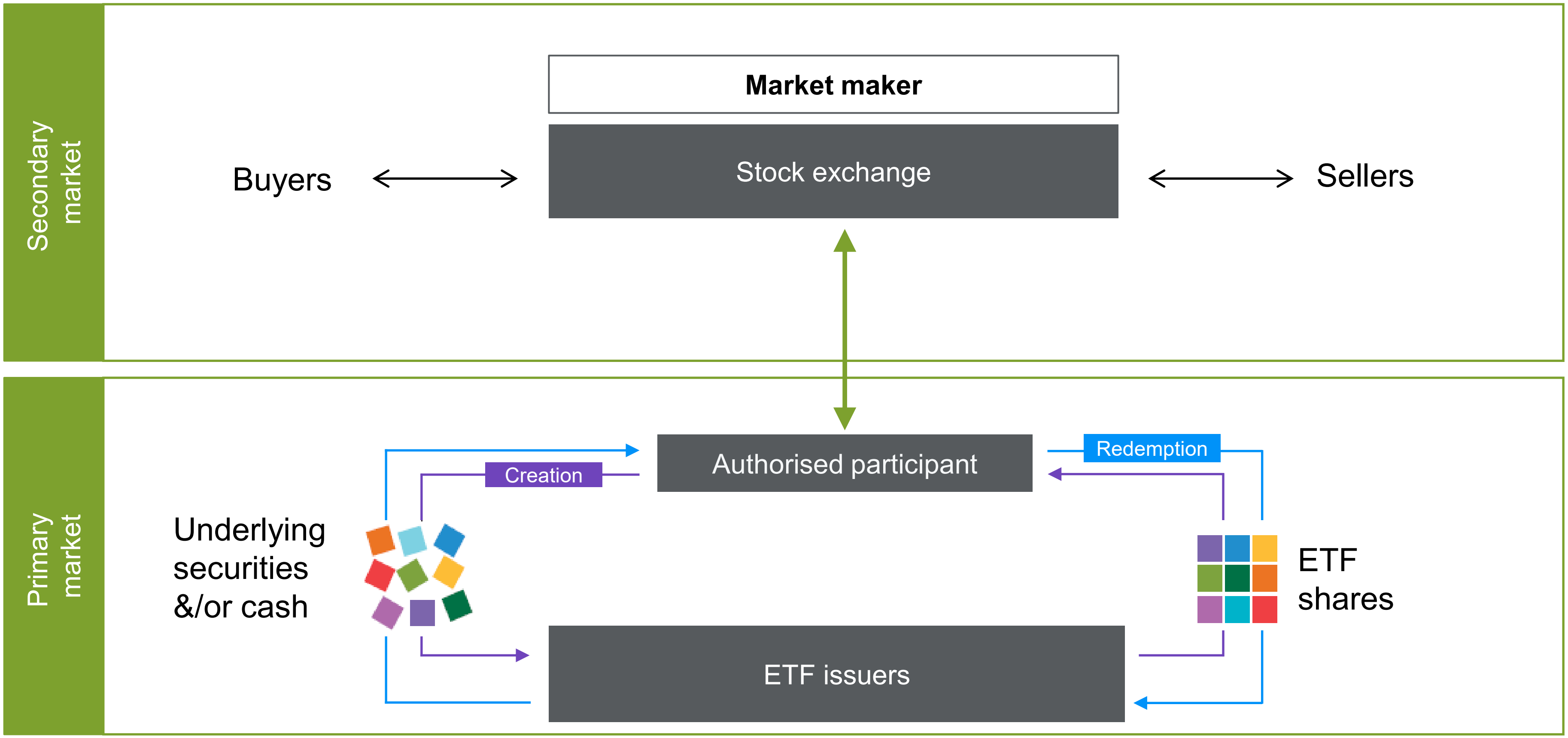
Source: Bloomberg, J.P. Morgan Asset Management; as of 31 March 2025. Top of the pyramid represents the average of the 20-day average daily volume (ADV) for the 11 active ETFs in the category. The bottom of the pyramid represents the implied liquidity in U.S. research enhanced representative index. For illustrative purposes only.
Guide to ETFs – EMEA. Data as 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

ETF mechanics

Creation and redemption process across all ETFs



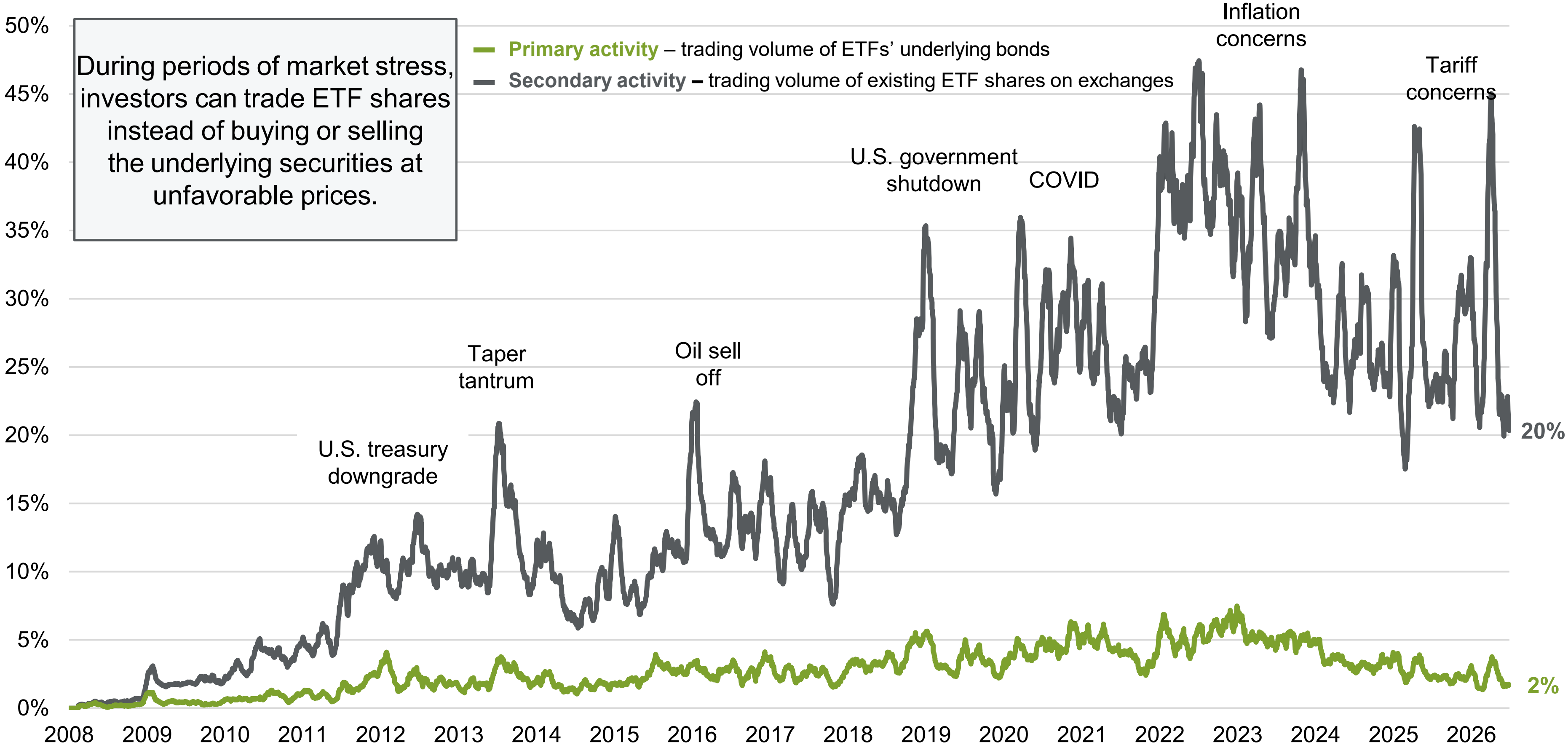
Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Market stress highlights ETFs' liquidity powers

High yield ETF trading volume in periods of market stress

Share (%) of 20-day rolling average trading volume of overall high yield bond market

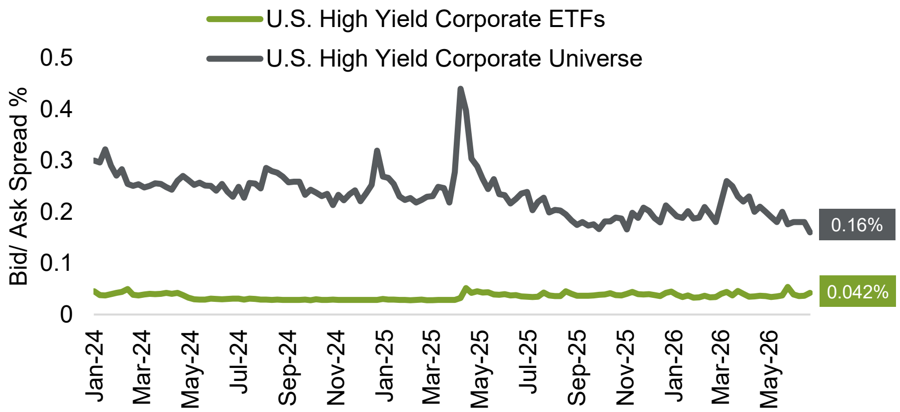


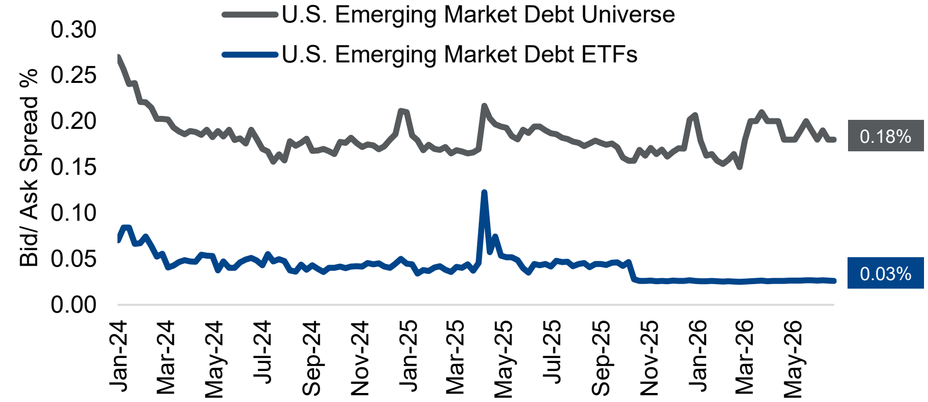
Source: Bloomberg, J.P. Morgan Asset Management. High yield ETF market is represented by HYG, JNK, IFLN, HYLB, SJNK, SHGY, USHY, HYLS, ANGL, HYS, BSJL, BSJM, BSJK and BBHY. High yield bond market is represented by FINRA TRACE Market Breadth high yield Bond Dollar Volume (NTMBHV) and FINRA TRACE 144a HY $ Vol (NTMB4HYV).
Guide to ETFs – EMEA. Data as of 30 June 2026.

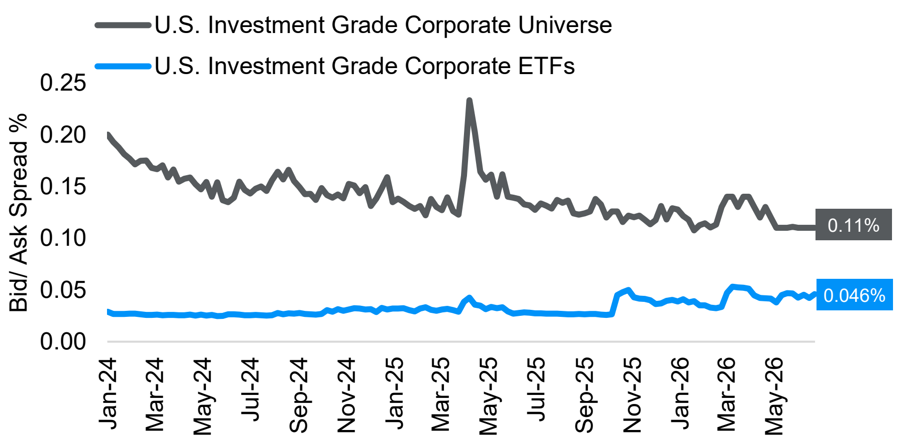
For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Cost benefits of ETFs

ETFs historically have tighter spreads than the underlying bonds







Underlying high yield securities trade on average **6.6x wider** compared to overall ETF

Underlying emerging market securities trade on average **4.4x wider** compared to overall ETF

Underlying investment grade securities trade on average **4.3x wider** compared to overall ETF

Source: Bloomberg, MarketAxess, J.P. Morgan Asset Management. High Yield (HY) Corporate ETFs represented by the top 10 HY ETFs by AUM in the Morningstar High Yield category. Emerging Market Debt (EMD) Corporate ETFs represented by the top 5 EMD ETFs by AUM in the Morningstar EMD category. Investment Grade (IG) Corporate ETFs represented by the top 10 IG ETFs by AUM in the Morningstar IG category. Data as of 22 June 2026.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Reducing transaction costs within fixed income ETF

Creation example

Authorised participant

1. Proposes a list of bonds in inventory or that they can easily source

4. Accepts or rejects proposed basket and can provide an alternative basket for consideration

ETF portfolio manager

2. Determines which of those bonds fit in the portfolio based on pre-established criteria

3. Proposes a creation basket that combines cash and the selected bonds

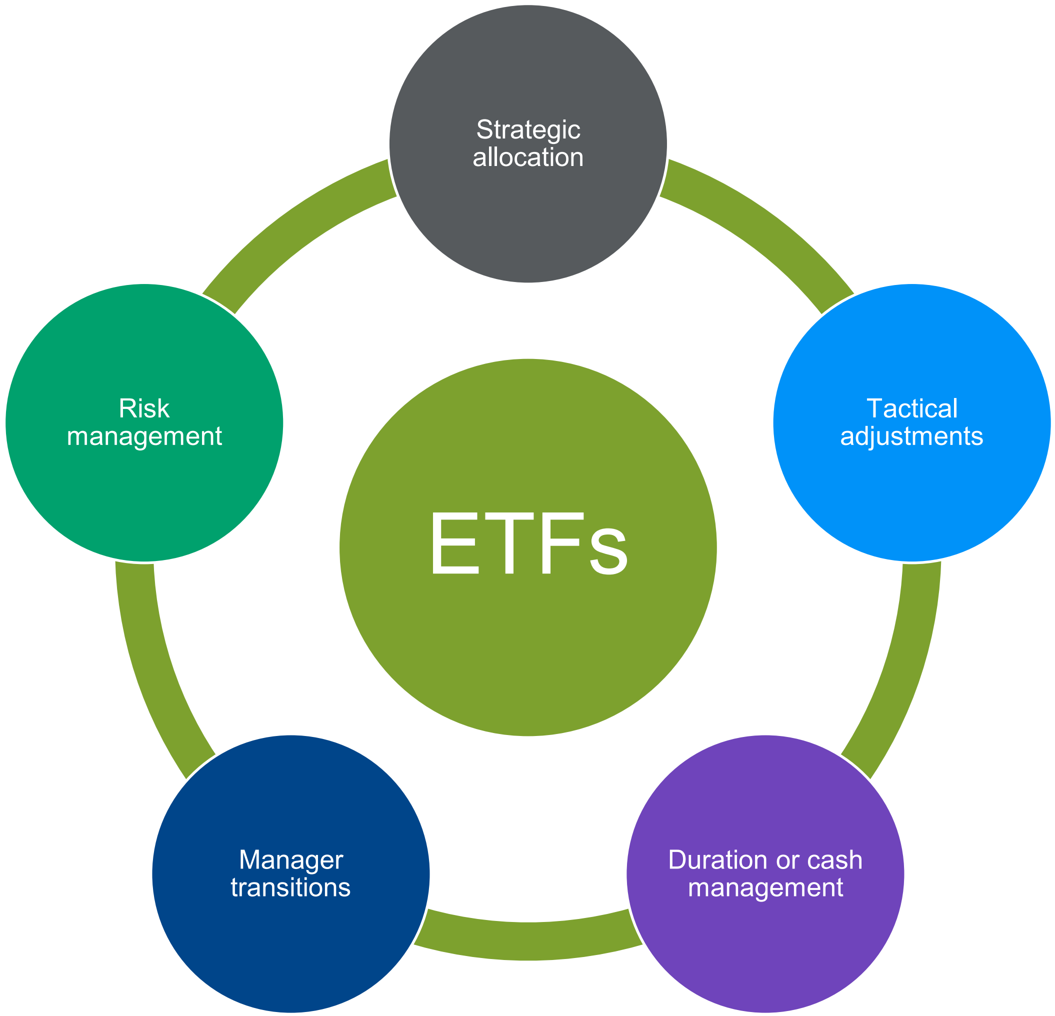
Inventory →

← Proposed basket

Transaction often targets constant shape of the portfolio (duration, spread, sector)

Technology often aids the negotiation process

ETF use cases

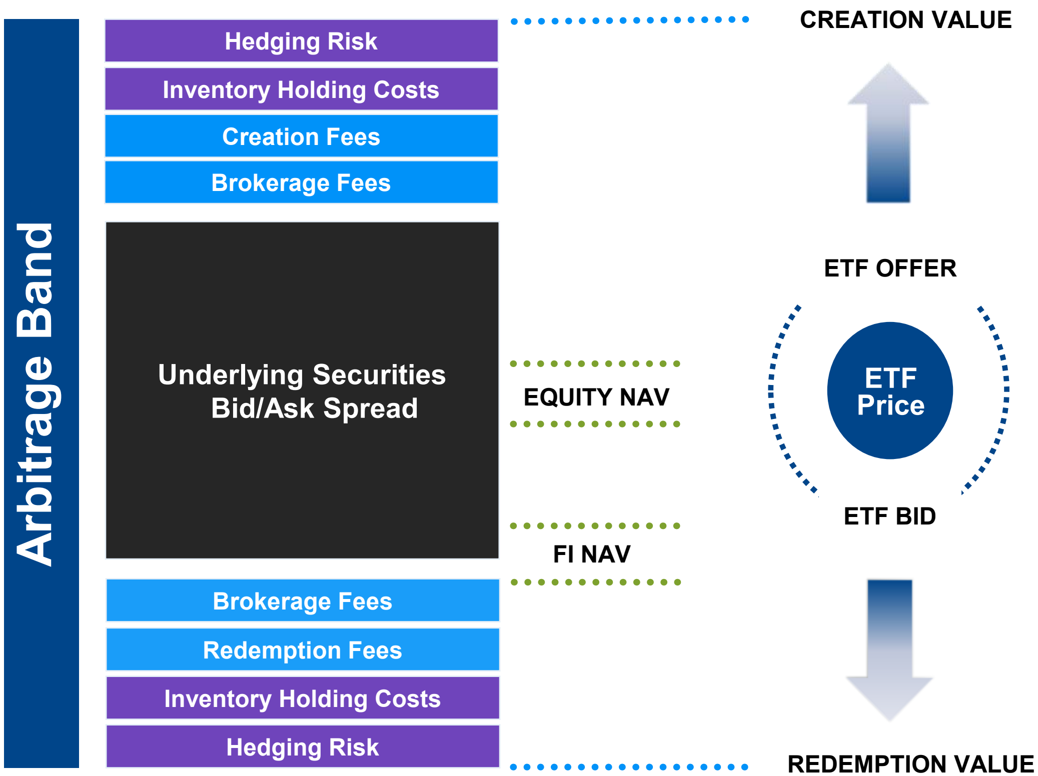


Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

What is the ETF arbitrage mechanism?

Arbitrage incentivizes market makers to keep the price of an ETF close to its NAV



Net Asset Value (NAV) – value of the underlying securities in the fund

ETF Bid – price at which market makers will buy

ETF Offer – price at which market makers will sell

Underlying Securities Bid/Ask Spread – average spread of the underlying securities

Brokerage Fees – costs associated with trading the underlying basket

Creation/Redemption Fee – fees that cover ticket charges, settlement costs, and transaction costs

Inventory Holding Costs – unique to each liquidity provider; includes cost of capital, current positioning, and broader market considerations

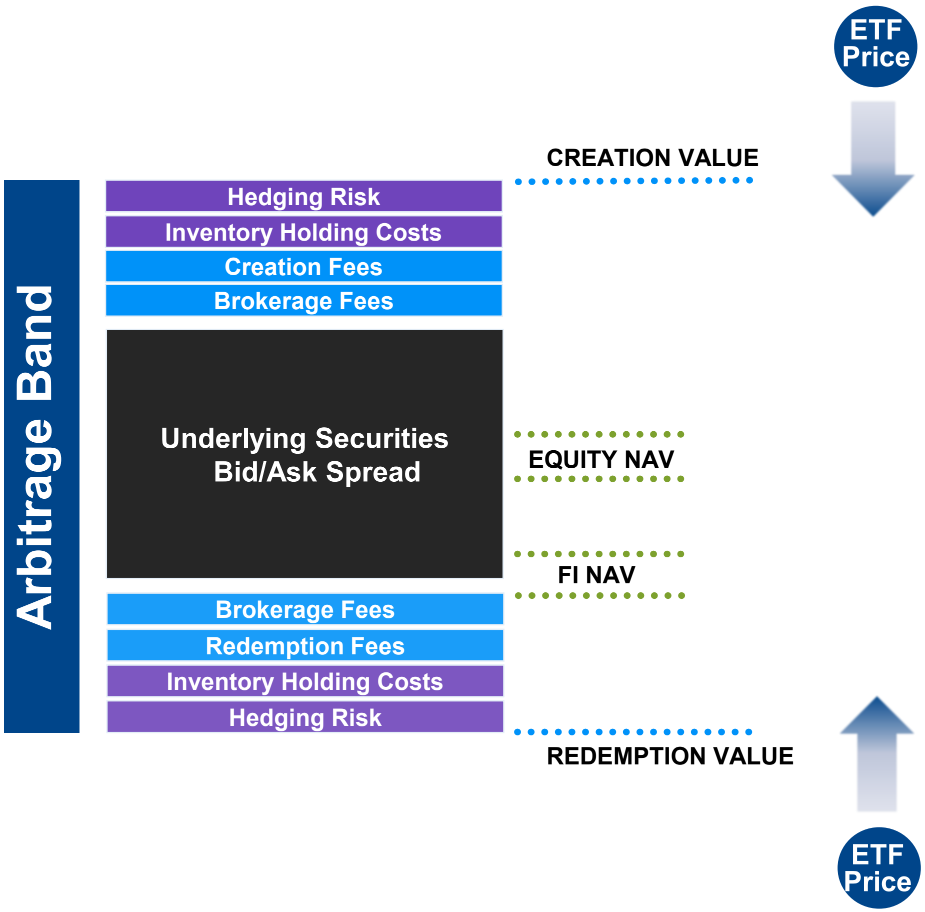
Hedging Costs – the cost to hedge additional market, currency, interest rate, or credit exposure from a new trade/position

Source: J.P. Morgan Asset Management. FX and taxes are two additional components that may impact pricing related to ETFs with international constituents. NAV for fixed income ETFs is struck at bid in this example, while NAVs for equity ETFs are struck using the last price. Some fixed income ETFs may price NAV using mid price. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

ETF arbitrage mechanism in practice



Scenario 1: ETF Trading "Rich"

- The **ETF** is trading **higher than** the **creation value** of the underlying basket.
- **Market maker will sell the ETF**, buy the underlying holdings, and **create new ETF shares** to offset short ETF position.
- ETF price moves **back** inside the creation value.

Market makers are incentivized to "arb" away any price discrepancies and the **ETF price remains close to the fair value** of the underlying basket

Scenario 2: ETF Trading "Cheap"

- The **ETF** is trading **lower than** the **redemption value** of the underlying basket.
- **Market maker will buy the ETF**, sell the underlying holdings, and **redeem existing ETF shares** to offset long ETF position.
- ETF price moves **back** inside the redemption value.

Source: J.P. Morgan Asset Management. FX and taxes are two additional components that may impact pricing related to ETFs with international constituents. NAV for fixed income ETFs is struck at bid in this example, while NAVs for equity ETFs are struck using the last price. Some fixed income ETFs may price NAV using mid price. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

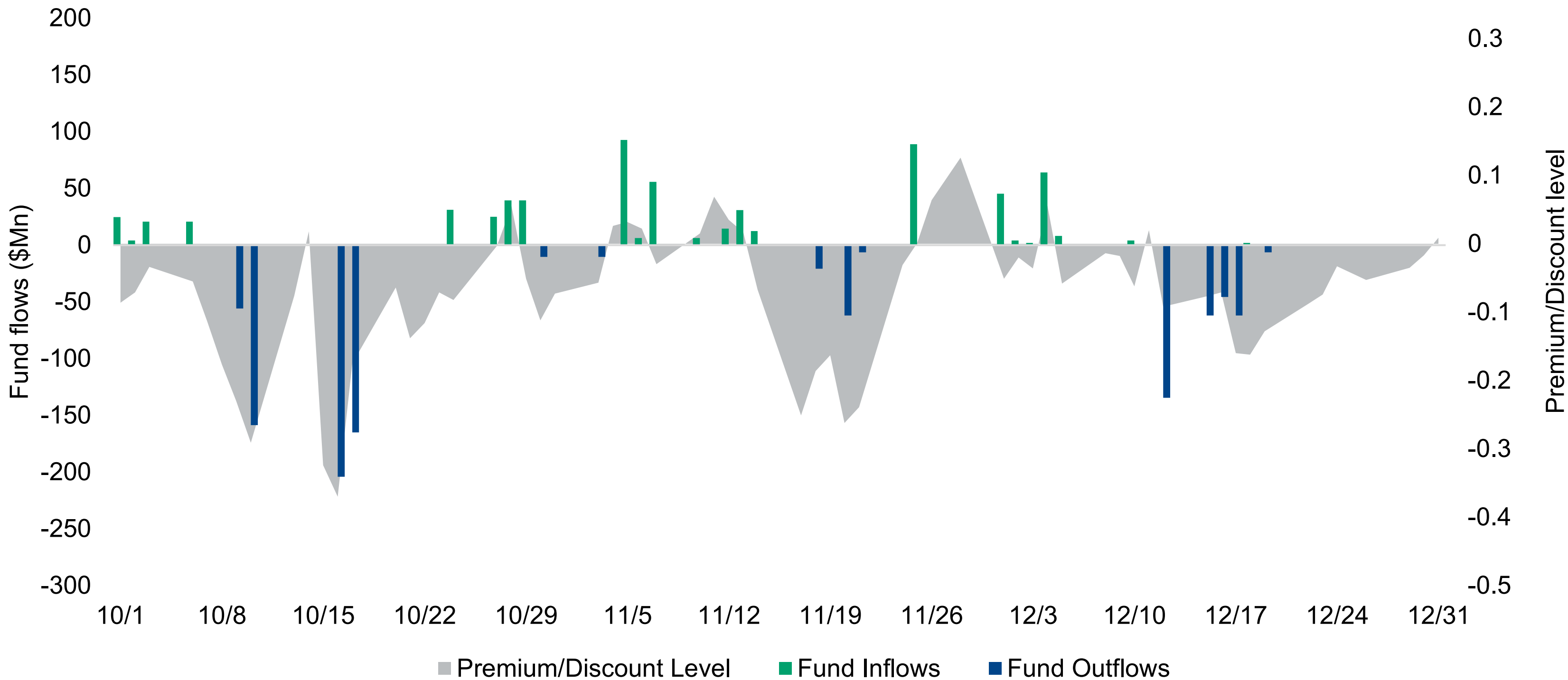
ETF premiums and discounts

Primary drivers:

- Liquidity of underlying basket
- Cost to create or redeem ETF shares
- Prevailing investor sentiment
- Market volatility

Other factors to consider:

- Closing auctions may impact end-of-day premium/discount levels
- Timing differences between the ETFs listed market close and NAV valuation point contributing to dislocations between price and NAV
- Fixed income ETFs may have natural premiums due to bid-side NAV pricing



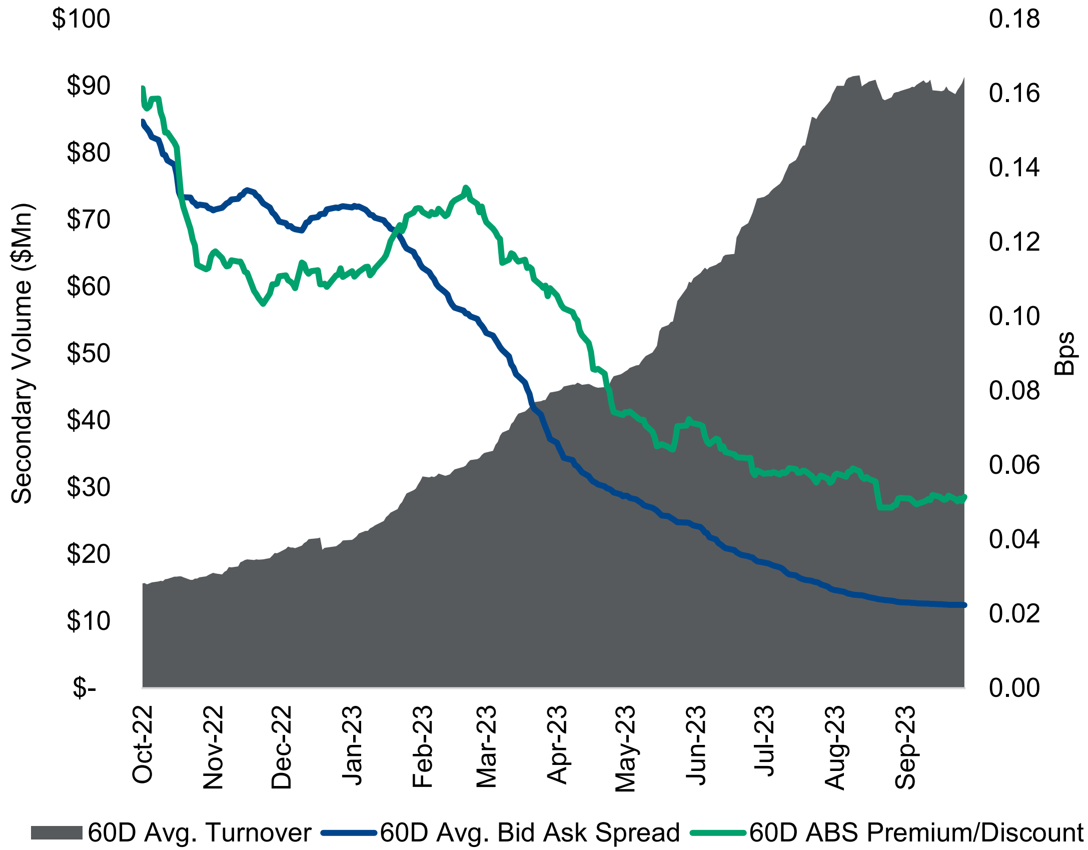
Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan
ASSET MANAGEMENT

The power of secondary markets

Robust secondary markets can help alleviate costs, often resulting in reduced bid ask spreads and more stable premium discount levels



Impact to Market Makers

More opportunities to manage positions in the secondary market reduces the need to create or redeem.

Hedging Risk / Inventory Holding Costs

Shorter inventory holding periods and reduced hedging needs can lower costs to manage positions.

Brokerage / Creation / Redemption Fees

Creation/redemption fees and brokerage fees from trading the underlying basket are realized less.

Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

J.P.Morgan ASSET MANAGEMENT

Ability for ETFs to absorb large trades

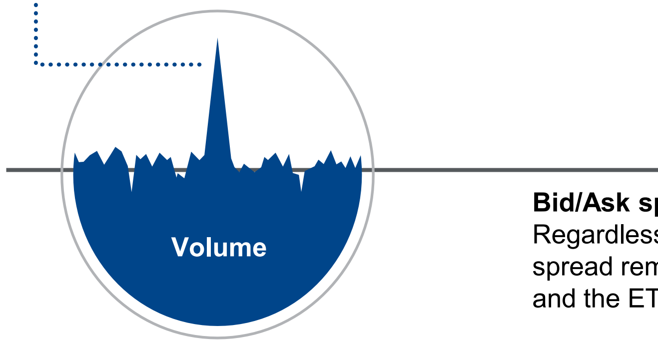
ETFs can move larger dollar amounts without moving markets when the underlying securities are leveraged to provide liquidity

Equity ETF example

15,000,000
Shares traded

3500x
Average daily trading volume

1925%
of the ETF's AUM



Bid/Ask spread
Regardless of the volume, the bid/ask spread remains virtually unchanged and the ETF remains liquid.

An investor bought 1925% of a new equity ETF which represented 3500 times its average daily trading volume at the time, to replace futures.

The ETF purchased was able to absorb the trade with no noticeable impact on the market.

Underlying liquidity* of the asset class is an important component

Source: Top: Bloomberg, J.P. Morgan Asset Management; as of November 2024. Bottom: Equities, Bloomberg, J.P. Morgan Asset Management; as of 31 March 2025. Fixed Income: SIFMA, J.P. Morgan Asset Management; as of 31 March 2025. For illustrative purposes only. *Liquidity is represented by the average daily volume (ADV) of the asset class over the first quarter of 2025.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

Trading an ETF

There are three ways to trade an ETF in the secondary market, before ETF shares are created in the primary market by Authorised Participants

1. Over the Counter (OTC)

NAV

Risk*

2. On Exchange

Agency*

Source: J.P. Morgan Asset Management. *Benchmarked to screen bid/ask price. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

For Professional Clients / Qualified Investors only – not for Retail use or distribution.

ETF trading considerations

On Exchange order types

Agency Order

Employing a broker to work the order by accessing the available ETF and underlying (security) liquidity. Can also be achieved using algorithms.

Designed to: Manage risk and market impact via agency broker and reduce information leakage.

Appropriate for: Orders that account for higher % of volume.

Limit Order

Allows you to set the max and min price for buying/selling shares

Designed to: Achieve stated price or better, but not guaranteed to complete.

Appropriate for: Orders that account for lower % of volume.

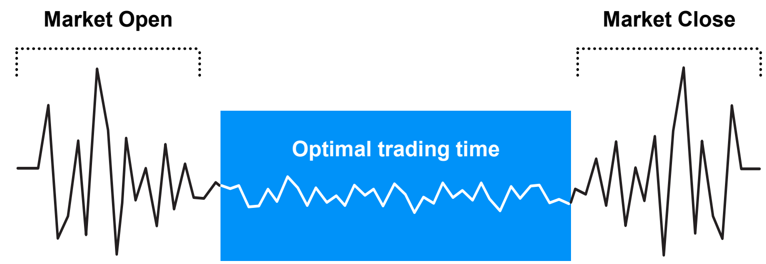
Market Order

A request to trade immediately at the best available price.

Designed to: Provide immediate execution but price achieved could be far higher (or lower) than expected given order book depths.

Appropriate for: Orders for share quantities smaller than displayed quantities.

Tips to help avoid suboptimal trade execution:



- Avoid trading at the European market open/close and know primary market dealing cut-off times
- Consider factors such as urgency, size, information leakage, prevailing market conditions, and the underlying ETF exposure
- Assess where the ETF is trading relative to fair value
- Get to know our ETF capital markets team to help assess true ETF liquidity and assist with efficient trade execution

Source: J.P. Morgan Asset Management. For illustrative purposes only.
Guide to ETFs – EMEA. Data as of 30 June 2026.

J.P. Morgan Asset Management – Risks & disclosures

Guide to ETFs provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions.

For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be taken as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit, and accounting implications and determine, together with their own financial professional, if any investment mentioned herein is believed to be appropriate to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. Investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not a reliable indicator of current and future results.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide. To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our privacy policies at https://am.jpmorgan.com/global/privacy.

This communication is issued by the following entities: In the United States, by J.P. Morgan Investment Management Inc. or J.P. Morgan Alternative Asset Management, Inc., both regulated by the Securities and Exchange Commission; in Latin America, for intended recipients' use only, by local J.P. Morgan entities, as the case may be.; in Canada, for institutional clients' use only, by JPMorgan Asset Management (Canada) Inc., which is a registered Portfolio Manager and Exempt Market Dealer in all Canadian provinces and territories except the Yukon and is also registered as an Investment Fund Manager in British Columbia, Ontario, Quebec and Newfoundland and Labrador. In the United Kingdom, by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions, by JPMorgan Asset Management (Europe) S.à r.l. In Asia Pacific ("APAC"), by the following issuing entities and in the respective jurisdictions in which they are primarily regulated: JPMorgan Asset Management (Asia Pacific) Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited, each of which is regulated by the Securities and Futures Commission of Hong Kong; JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), this advertisement or publication has not been reviewed by the Monetary Authority of Singapore; JPMorgan Asset Management (Taiwan) Limited; JPMorgan Asset Management (Japan) Limited, which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Australia, to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Commonwealth), by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919).

For all markets in APAC, to intended recipients only – NOT FOR RETAIL USE OR DISTRIBUTION.

For U.S. only: If you are a person with a disability and need additional support in viewing the material, please call us at 1-800-343-1113 for assistance.

Copyright 2026 JPMorgan Chase & Co. All rights reserved.

Unless otherwise stated, all data are as of 30 June 2026 or most recently available.

Guide to ETFs

JP-GTE I 4b244288-ce8e-11ef-8424-0d7857a11127

J.P.Morgan
ASSET MANAGEMENT