
Morningstar Direct European ETF Asset Flows Update—Q1 2021

Morningstar Manager Research

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Key Takeaways

- ▶ The European exchange-traded fund market had a stellar start to 2021, gathering EUR 48.2 billion of inflows in the first quarter, a new quarterly high. Assets under management grew by 10% to EUR 1.16 trillion.
- ▶ The trend toward sustainable investing accelerated in the first quarter with 54% of total inflows in the period directed to environmental, social, and governance ETFs. Assets in ESG ETFs already represent 10.2% of total assets invested in ETFs in Europe.
- ▶ Risk-on sentiment favoured equity ETFs, which netted close to 90% of total inflows in the first quarter.
- ▶ The flows data provided evidence of a rotation from growth to value equity strategies.
- ▶ Flows into thematic ETFs amounted to EUR 5.5 billion in the first quarter, a new high for this segment, while assets grew to EUR 29.4 billion from EUR 23.2 at the end of 2020.

Executive Summary

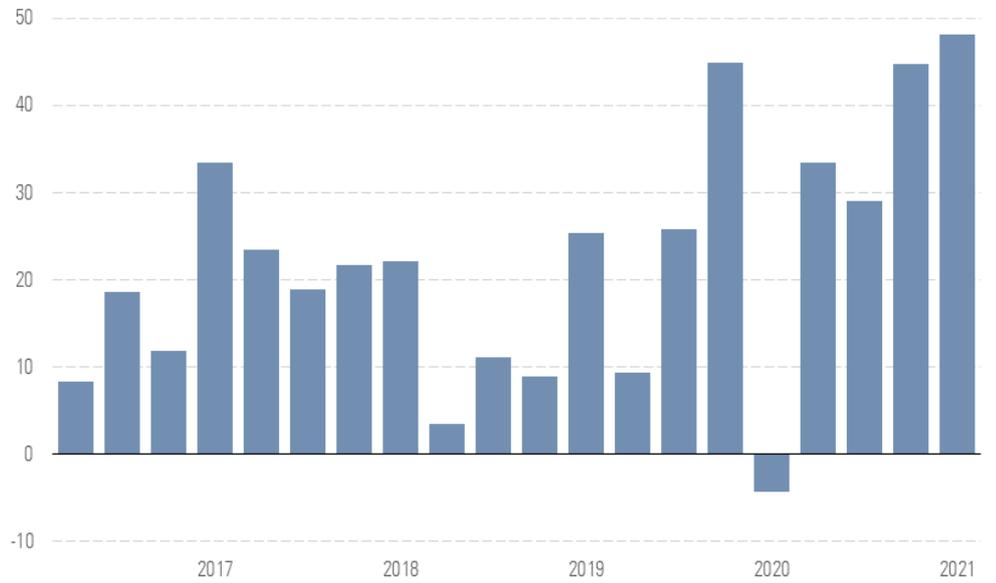
The European ETF market—inclusive of exchange-traded commodities—started 2021 on a high, with net inflows of EUR 48.2 billion in the first quarter, up from EUR 44.8 billion in the last quarter of 2020 and setting a new quarterly record. Assets under management rose by 10% to EUR 1.16 trillion from EUR 1.05 trillion at the close of 2020, with inflows and capital appreciation contributing to the increase.

The trend in favour of ESG investments accelerated in the first quarter of 2021. ESG ETFs gathered EUR 25.8 billion of inflows in the period, up from EUR 21.3 billion in the last quarter of 2020. This accounted for 54% of total money invested in ETFs during the period. Assets in ESG ETFs have increased to EUR 117.9 billion from EUR 87.0 billion at the end of 2020 and already represent 10.2% of total assets invested in ETFs in Europe.

In terms of broad asset classes, equity was king, attracting EUR 42.4 billion of flows in the first quarter. This was just shy of 90% of all money invested in ETFs over the period and built on what had already been a good fourth-quarter 2020 when equity ETFs netted EUR 38.6 billion. The mix of inflows and increase in valuations propelled assets in equity ETFs to EUR 776.1 billion from EUR 674.9 billion at the end of 2020. Meanwhile, flows into bond ETFs amounted to EUR 4.3 billion in the first quarter, down from EUR 9.8 billion in the previous period.

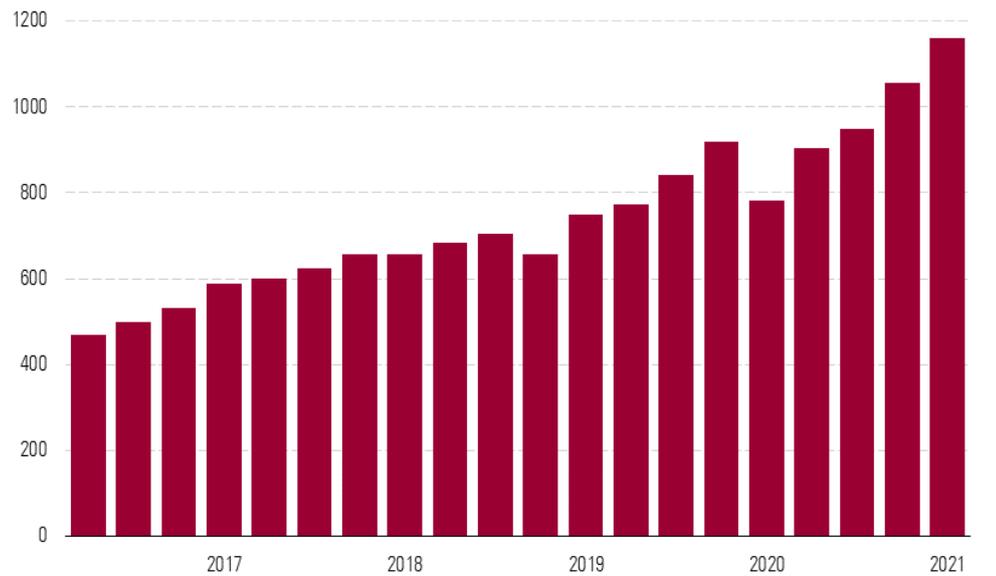
The much talked about rotation from growth to value found confirmation in first-quarter flows, with value equity strategies netting EUR 5.3 billion. US large-cap value equity and global large-cap value equity were among the top 10 flow-gathering Morningstar Categories in the period, whereas US large-cap growth languished in the bottom 10.

Exhibit 1 Europe ETF Market Quarterly Net Flows (EUR, Billion)



Source: Morningstar Direct. Data as of 31/03/2021.

Exhibit 2 Europe ETF Market Quarterly Assets Under Management (EUR, Billion)



Source: Morningstar Direct. Data as of 31/03/2021.

Flows by Main Asset Class

Exhibit 3 Europe ETF Net Flows and Assets Under Management by Broad Asset Class (EUR, Billion)

	Net Flows					AUM	
	Jan	Feb	Mar	Q1 2021	Q4 2020	Q1 2021	Q4 2020
Allocation	0.08	0.05	0.13	0.26	-0.02	2.09	1.74
Alternative	0.13	0.40	0.22	0.75	-0.96	9.11	8.34
Commodities	1.92	0.35	-1.91	0.37	-2.19	90.38	93.98
Convertibles	0.03	0.09	0.01	0.14	0.04	1.43	1.26
Equity	12.65	10.68	19.10	42.44	38.63	776.10	674.86
Fixed Income	1.80	5.00	-2.52	4.29	9.75	270.78	267.93
Miscellaneous	0.04	0.21	0.16	0.41	0.17	6.28	2.82
Money Market	-0.28	-0.07	-0.15	-0.50	-0.62	2.82	3.31
Total	16.39	16.72	15.04	48.15	44.78	1,158.99	1,054.23

Source: Morningstar Direct. Data as of 31/03/2021.

Equity

Exhibit 4 Equity ETF Net Flows by Morningstar Category (EUR, Billion)

Top 10	Q1 2021	Bottom 10	Q1 2021
US Large-Cap Blend Equity	6.67	Australia & New Zealand Equity	-0.11
Global Large-Cap Blend Equity	5.58	Global Flex-Cap Equity	-0.12
Global Emerging Markets Equity	5.00	Europe Large-Cap Blend Equity	-0.16
Sector Equity Financial Services	3.74	Sector Equity Precious Metals	-0.17
Sector Equity Technology	2.89	Property - Indirect Global	-0.21
US Large-Cap Value Equity	2.61	Latin America Equity	-0.26
Sector Equity Energy	2.17	US Large-Cap Growth Equity	-0.28
Global Large-Cap Value Equity	1.61	France Equity	-0.33
UK Mid-Cap Equity	1.47	Germany Equity	-0.48
Other Equity	1.39	Eurozone Large-Cap Equity	-2.01

Source: Morningstar Direct. Data as of 31/03/2021.

Equity ETFs gathered EUR 42.5 billion of inflows in the first quarter of 2021. These flows represented almost 90% of total money invested in ETFs in Europe over the period and were up from EUR 38.6 billion in the last quarter of 2020.

The trend toward ESG investments continued apace. Equity ESG ETFs attracted EUR 18.3 billion of flows in the first quarter. This accounted for 43% of total flows into equity ETFs over the period.

Assets in equity ETFs grew by 15% over the quarter to EUR 776 billion from EUR 675 billion at the close of 2020 and represent 67% of total assets invested in ETFs in Europe.

Risk-on sentiment was dominant as the rollout of COVID-19 vaccines and its positive impact on equity market valuations across the globe continued to buoy investors. However, the flows data shows investors making a differentiation between geographical areas based on the rate of success of local vaccination programmes. For example, eurozone large-cap equity, France equity, and Germany equity ETFs all saw outflows and were the bottom three categories for flows in the first quarter. By contrast, US large-cap blend equity ETFs attracted a solid EUR 6.7 billion of inflows and even UK mid-cap equity ETFs found their way into the top 10. It is hard not to think that the eurozone has sorely lagged the United States and United Kingdom in the administration of vaccines to its population and is paying the price in terms of investors' allocation preferences.

Away from vaccine-led investment decisions, the data also provided evidence of a rotation toward value strategies. The move from growth to value had been touted extensively for much of 2020, and it seems that investors are finally putting their money where their mouths are. US large-cap value equity and global large-cap value equity ETFs attracted EUR 2.6 billion and EUR 1.6 billion, respectively, in the first quarter. By contrast, US large-cap growth equity ETFs saw outflows close to EUR 300 million.

Exhibit 5 Equity ETF Net Flows by Fund (EUR, Billion)

Top 10	Q1 2021	Bottom 10	Q1 2021
iShares Core MSCI World ETF	2.29	Amundi IS S&P 500 ETF	-0.47
Xtrackers S&P 500 Equal Weight ETF	2.25	Xtrackers MSCI Europe ETF	-0.50
iShares Edge MSCI USA Value Factor ETF	1.97	BNPP Easy S&P 500 ETF	-0.50
UBS ETF MSCI ACWI ESG Universal	1.40	iShares S&P 500 EUR Hedged ETF	-0.53
Lyxor MSCI World Financials TR ETF	1.35	iShares EURO STOXX 50 (DE)	-0.61
iShares Edge MSCI Wld Val Fctr ETF	1.31	Invesco S&P 500 ETF	-0.70
Vanguard FTSE 250 ETF	1.21	UBS ETF MSCI EMU	-0.75
Xtrackers MSCI Emerging Markets ETF	1.12	Vanguard S&P 500 ETF	-0.94
iShares MSCI USA ESG Screened ETF	1.08	UBS FS MSCI ACWI SF	-1.42
Amundi IS Amundi MSCI USA SRI	1.07	iShares Core S&P 500 ETF	-1.66

Source: Morningstar Direct. Data as of 31/03/2021.

In terms of individual funds, several mainstream S&P 500 ETFs appeared in the bottom 10 for the quarter. This would look at odds with the fact that US large-cap blend equity was the top money-gathering equity category in the period. However, the bulk of flows in this category were directed to ESG investments, so it is fair to conclude that some investors who previously had their money in the mainstream S&P 500 ETFs switched to the ESG versions.

Fixed Income

Exhibit 6 Fixed-Income ETF Net Flows by Morningstar Category (EUR, Billion)

Top 10	Q1 2021	Bottom 10	Q1 2021
RMB Bond - Onshore	2.85	EUR Bond - Long Term	-0.23
USD Corporate Bond	2.62	JPY Bond	-0.33
Global Emerging Markets Corporate Bond	0.73	Global Emerging Markets Bond - EUR Biased	-0.34
EUR Corporate Bond - Short Term	0.72	Global Emerging Markets Bond	-0.38
Other Bond	0.69	Global Emerging Markets Bond - Local Currency	-0.45
EUR Inflation-Linked Bond	0.58	GBP Corporate Bond	-0.46
Global Bond - USD Hedged	0.58	EUR High Yield Bond	-0.65
USD Inflation-Linked Bond	0.57	EUR Government Bond	-0.92
Global Bond - GBP Hedged	0.42	USD Government Bond	-1.18
USD High Yield Bond	0.29	EUR Corporate Bond	-1.84

Source: Morningstar Direct. Data as of 31/03/2021.

Flows into bond ETFs totalled EUR 4.3 billion, down from EUR 9.8 billion in the fourth quarter of 2020. Assets grew to EUR 270.8 billion from EUR 267.9 billion. This means that inflows were partly offset by capital losses.

In terms of categories, as was the case in the last quarter of 2020, Chinese Treasury bonds were a favourite, attracting EUR 2.9 billion. Their appeal is easy to understand from a risk/return perspective. They offer a tasty yield pickup compared with developed-markets government bonds and have proved remarkably resilient within the cohort of emerging markets.

Elsewhere investors showed interest in inflation protection. Eurozone and US inflation-linked bond ETFs gathered inflows of EUR 580 million and EUR 570 million, respectively, in the first quarter.

In terms of individual funds, special mention goes to the SPDR Bloomberg SASB U.S. Corporate ESG ETF, which was the highest-grossing bond ETF—in fact, the highest-grossing ETF overall—in the quarter in Europe with EUR 4.5 billion of inflows. This has all the hallmarks of being a one-off large investment from an institutional investor, not least as all the money came in bulk in the month of February, but it nonetheless goes to show that ESG fixed-income ETFs are starting to make important inroads with investors. In fact, four of the top 10 money-gathering bond ETFs in the first quarter track ESG indexes, and interestingly they all represent different areas of the fixed-income market.

Exhibit 7 Fixed-Income ETF Net Flows by Fund (EUR, Billion)

Top 10	Q1 2021	Bottom 10	Q1 2021
SPDR® Bloomberg SASB U.S. Corp ESG ETF	4.53	SPDR® Blmbrg Bcly 0-3 Yr EUR Corp Bd ETF	-0.35
iShares China CNY Bond ETF	2.46	Amundi IS US Treasury 7-10	-0.39
iShares € Corp Bond 0-3yr ESG ETF	0.63	iShares € Corp Bond Lg Cp ETF	-0.45
iShares \$ High Yield Corp Bond ESG ETF	0.52	iShares JP Morgan \$ EM Bond EURH ETF	-0.45
Vanguard Global Aggregate Bond ETF	0.51	iShares Core £ Corp Bond ETF	-0.47
iShares € Ultrashort Bond ETF	0.45	Xtrackers II Eurozone Govt Bond ETF	-0.56
L&G ESG Emerging Markets Corp Bd USD ETF	0.43	iShares \$ Treasury Bd 7-10y ETF	-0.71
iShares Core Global Aggregate Bond ETF	0.43	iShares € High Yield CorpBd ETF	-0.97
iShares \$ TIPS ETF	0.40	iShares Core € Corp Bond ETF	-1.51
iShares JPMorgan \$ EM Corp Bond ETF	0.36	iShares \$ Corp Bond ETF	-2.26

Source: Morningstar Direct. Data as of 31/03/2021.

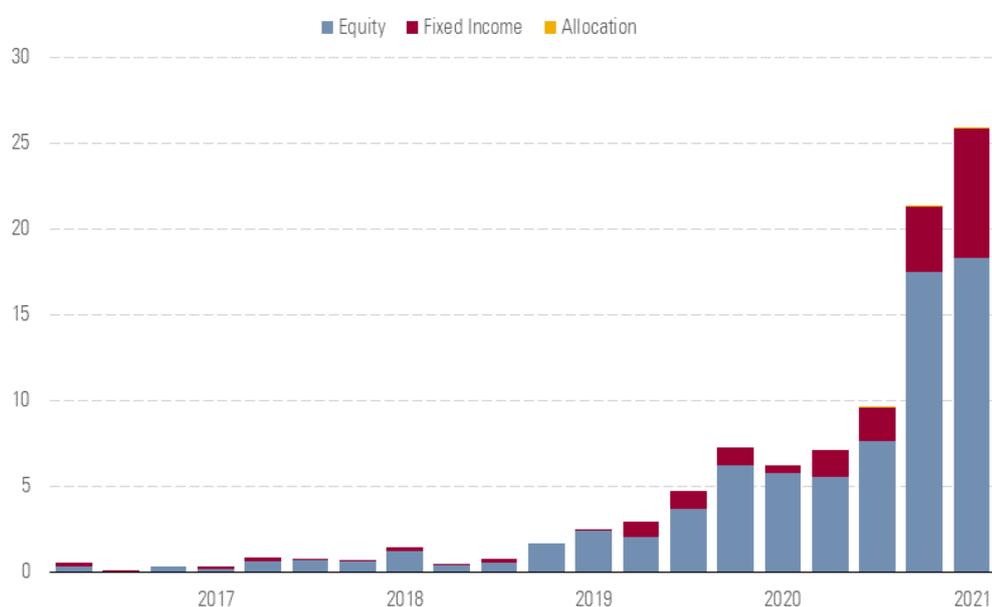
ESG**Exhibit 8** European ESG ETF Flows and Assets Under Management (EUR, Billion)

	Net Flows					AUM	
	Jan	Feb	Mar	Q1 2021	Q4 2020	Q1 2021	Q4 2020
Equity	7.53	5.61	5.16	18.31	17.49	95.40	72.03
Fixed Income	0.40	5.91	1.21	7.52	3.77	22.45	14.99
Allocation	0.004	0.004	0.002	0.01	0.01	0.02	0.01
Total ESG	7.94	11.52	6.38	25.84	21.26	117.88	87.04
ETF Market Grand Total				48.15	44.78	1,158.99	1,054.23
% ESG				53.7%	47.5%	10.2%	8.3%

Source: Morningstar Direct. Data as of 31/03/2021.

Flows into ESG ETFs amounted to EUR 25.8 billion in the first quarter, up from EUR 21.3 billion in the last quarter of 2020. This represented close to 54% of total flows in ETFs in the period. Assets in ESG ETFs grew to EUR 117.9 billion from EUR 87.0 billion at the end of 2020 and already account for 10.2% of all money invested in ETFs in Europe.

There has been a significant increase in flows into ESG products in the last two quarters, and this is expected to continue, supported by new money and by a rotation from non-ESG investments into ESG alternatives. ESG is one of the key priorities in terms of product development for ETF providers in 2021.

Exhibit 9 European ESG ETF Flows (EUR, Billion)

Source: Morningstar Direct. Data as of 31/03/2021.

Strategic Beta**Exhibit 10** European Strategic-Beta ETF Flows and Assets Under Management (EUR, Billion)

	Net Flows					AUM	
	Jan	Feb	Mar	Q1 2021	Q4 2020	Q1 2021	Q4 2020
Commodity	0.29	0.51	-0.17	0.63	-0.03	5.16	4.01
Dividend	-0.04	0.11	0.70	0.78	0.04	24.72	21.64
Fixed Income	0.05	-0.02	0.05	0.07	0.14	2.24	2.21
Fundamentals	0.01	0.00	0.00	0.01	-0.01	0.28	0.23
Growth	0.02	0.01	-0.09	-0.06	0.02	0.63	0.66
Momentum	0.17	-0.06	0.92	1.02	0.06	4.99	3.79
Multi-Factor	-0.02	0.10	-0.12	-0.03	-0.22	4.43	4.06
Other	0.28	0.75	2.01	3.05	1.85	7.80	4.14
Quality	-0.14	-0.09	0.05	-0.17	-0.52	4.75	4.57
Risk-Oriented	-0.33	-0.16	-0.50	-0.98	-0.79	8.21	8.73
Value	0.88	0.46	3.94	5.28	3.26	16.03	9.01
Total Strategic Beta	1.17	1.63	6.80	9.60	3.80	79.24	63.04
ETF Market Grand Total				48.15	44.78	1,158.99	1,054.23
% Strategic Beta						6.8%	6.0%

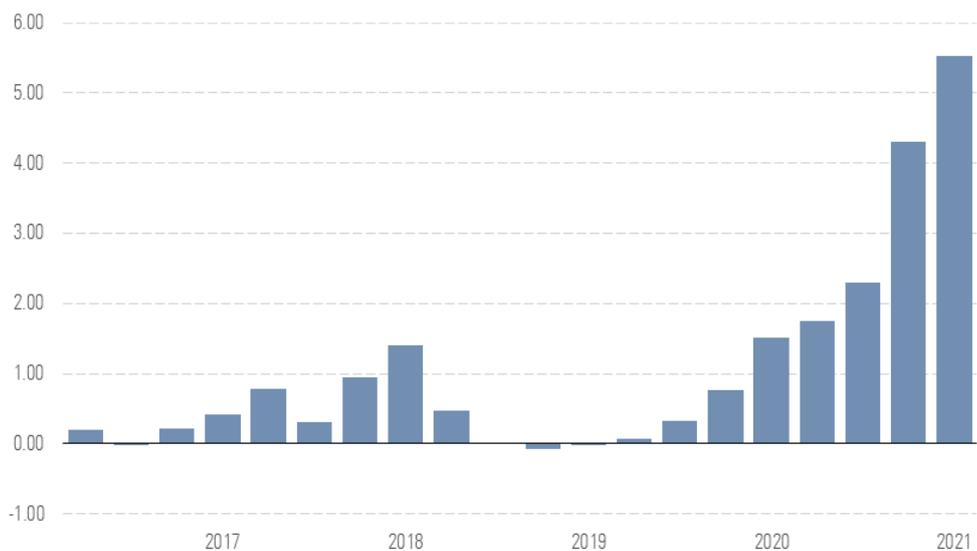
Source: Morningstar Direct. Data as of 31/03/2021.

Strategic-beta ETFs attracted EUR 9.6 billion of inflows in the first quarter, up from EUR 3.8 billion in the fourth quarter of 2020. The increase was led by the group of value equity ETFs, which gathered EUR 5.3 billion over the period and saw assets increase to EUR 16 billion from EUR 9 billion.

Assets in strategic-beta ETFs amount to EUR 79.2 billion and represent 6.8% of total assets invested in ETFs in Europe. Dividend strategies remain the largest grouping in the strategic-beta universe in Europe, with assets of EUR 24.7 billion.

Thematic

Exhibit 11 European Thematic ETF Flows (EUR, Billion)



Source: Morningstar Direct. Data as of 31/03/2021.

Thematic ETFs attracted a record EUR 5.5 billion in net money across the quarter, helping to push total asset levels to an all-time high of EUR 29.4 billion.

iShares Global Clean Energy ETF USD was the biggest recipient of funds, collecting EUR 613 million in the period. Another winner was Invesco Elwood Global Blockchain ETF, which targets companies with exposure to blockchain technology and hauled in EUR 405 million.

Notable new thematic launches in the period included hydrogen economy ETFs from LGIM and Van Eck.

Provider League Table

Exhibit 12 Top 10 European Providers (Ranked by Assets Under Management) (EUR, Billion)

	Net Flows		AUM		Market Share (%)	
	Q1 2021	Q4 2020	Q1 2021	Q4 2020	Q1 2021	Q4 2020
iShares	15.5	22.4	505.1	466.1	43.6%	44.2%
Xtrackers	7.2	4.7	129.4	115.9	11.2%	11.0%
Lyxor	3.6	-0.2	86.0	77.3	7.4%	7.3%
UBS	2.0	3.4	72.8	67.4	6.3%	6.4%
Amundi	3.2	3.8	72.0	65.5	6.2%	6.2%
Vanguard	2.8	3.0	61.9	54.4	5.3%	5.2%
State Street	6.0	2.7	49.2	40.8	4.2%	3.9%
Invesco	0.3	-0.5	42.6	40.5	3.7%	3.8%
WisdomTree	-0.2	0.0	22.9	23.5	2.0%	2.2%
BNP Paribas	1.7	1.6	13.1	10.5	1.1%	1.0%
Swisscanto	-0.6	0.5	12.6	12.4	1.1%	1.2%
Deutsche Borse	0.5	0.2	10.6	9.5	0.9%	0.9%
HSBC	0.0	-0.1	10.4	11.2	0.9%	1.1%
Deka	0.2	-0.2	10.3	10.7	0.9%	1.0%
PIMCO	2.3	0.8	9.8	6.9	0.8%	0.7%
LGIM	-0.2	0.3	8.3	8.3	0.7%	0.8%
JPMorgan	0.1	1.0	5.3	5.1	0.5%	0.5%
Handelsbanken	1.0	0.3	5.2	3.8	0.4%	0.4%
Credit Suisse	0.0	-0.4	4.5	4.1	0.4%	0.4%
Natixis	-0.4	0.0	3.9	1.9	0.3%	0.2%

(*) ETCs represent 90% of AUM of Wisdom Tree

Source: Morningstar Direct. Data as of 31/03/2021.

iShares was the top provider in terms of flows in the first quarter, attracting EUR 15.5 billion. However, this was down from EUR 22.4 billion in the last quarter of 2020. Assets in iShares ETFs grew to EUR 505 billion from EUR 466 billion, but its market share dropped from 44.2% to 43.6%.

Xtrackers saw inflows of EUR 7.2 billion, up from EUR 4.7 billion in the previous period. State Street came in third with EUR 6.0 billion, led by the one-off EUR 4.5 billion investment into SPDR Bloomberg SASB U.S. Corporate ESG ETF.

Lyxor attracted inflows of EUR 3.6 billion and assets increased to EUR 86.0 billion from EUR 77.3 billion. On 7 April, Amundi announced that it has entered exclusive negotiations to acquire Lyxor. The operation, subject to regulatory approval, is expected to conclude in early 2022. Based on current data, Amundi would become the second-largest ETF provider in Europe with a market share of 13.6%. ■■■

Annex—New Launches in Q1 2021

Name	Domicile	ISIN	Broad Category Group	Morningstar Category	Inception Date	Replication	KIID Ongoing Charge
iShares J.P. Morgan € EM Bd ETF EUR Dis	Ireland	IE00B6TQLL84	Fixed Income	EAA Fund Global Emerging Markets Bond - EUR Biasec	29/03/2021	Synthetic	0.35
VanEck Vectors Hydrogen Ecoy ETF A USD	Ireland	IE00BMDH1538	Equity	EAA Fund Other Equity	26/03/2021	Physical	0.55
VanEck Vectors Ethereum ETN A	Liechtenstein	DE000A3GPSP7	Miscellaneous	EAA Fund Other	26/03/2021	Physical	1.00
iShares JPM \$ EM Invt Grd Bd ETF USD Acc	Ireland	IE00BKPT2T41	Fixed Income	EAA Fund Global Emerging Markets Bond	25/03/2021	Physical	0.30
iShares € Green Bond ETF EUR Inc	Ireland	IE00BMDBMN04	Fixed Income	EAA Fund EUR Diversified Bond	25/03/2021	Physical	0.20
Fidelity Sust USD EM Bd ETF USD Inc	Ireland	IE00BM9GRP64	Fixed Income	EAA Fund Global Emerging Markets Bond	25/03/2021	Physical	0.50
iShares Global Govt Bond Climate ETF USD	Ireland	IE00BLOBMG90	Fixed Income	EAA Fund Global Bond	24/03/2021	Physical	0.20
iShares MSCI UK IMI ESG Ldrs ETF GBP Dis	Ireland	IE00BMDBMH44	Equity	EAA Fund UK Large-Cap Equity	23/03/2021	Physical	0.15
Fidelity Sust Glb Corp Bd Mftr ETF \$ Inc	Ireland	IE00BM9GRM34	Fixed Income	EAA Fund Global Corporate Bond	23/03/2021	Physical	0.25
Online Retail ETF	Ireland	IE00BN7JGL35	Equity	EAA Fund Sector Equity Consumer Goods & Services	19/03/2021	Physical	0.69
Leverage Shares 3x Tesla ETP	Ireland	XS2297549128	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -2x Short Tesla ETP	Ireland	XS2297550134	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x PayPal ETP	Ireland	XS2297550217	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short PayPal ETP	Ireland	XS2297550308	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Shopify ETP	Ireland	XS2297550563	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Shopify ETP	Ireland	XS2297551298	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Boeing ETP	Ireland	XS2297551371	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Boeing ETP	Ireland	XS2297551454	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Zoom ETP	Ireland	XS2297551611	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Zoom ETP	Ireland	XS2297551884	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Square ETP	Ireland	XS2297552262	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Square ETP	Ireland	XS2297552932	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Citigroup ETP	Ireland	XS2297553070	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Gldmn Schs ETP	Ireland	XS2297553153	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short JPMorgan ETP	Ireland	XS2297593456	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Barclays ETP	Ireland	XS2297618972	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Royal Dutch Shell ETP	Ireland	XS2297634318	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Sht Ryl Dch Shll ETP	Ireland	XS2297634409	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x BP ETP	Ireland	XS2297636107	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short BP ETP	Ireland	XS2297636875	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Vodafone ETP	Ireland	XS2297637253	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short Vodafone ETP	Ireland	XS2297637410	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x Barclays ETP	Ireland	XS2297618626	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares -1x Short HSBC ETP	Ireland	XS2297618204	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75
Leverage Shares 3x HSBC ETP	Ireland	XS2297618030	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	15/03/2021	n/a	0.75

Source: Morningstar Direct. Data as of 31/03/2021.

Name	Domicile	ISIN	Broad Category Group	Morningstar Category	Inception Date	Replication	KIID Ongoing Charge
AIS Amundi Euro Corp 0-1Y ESG ETF DR C	Luxembourg	LU2300294316	Fixed Income	EAA Fund EUR Corporate Bond - Short Term	15/03/2021	n/a	0.08
UBS ETF MSCI World Clmt Prs Algn A USD	Ireland	IE00BN4Q0370	Equity	EAA Fund Global Large-Cap Blend Equity	11/03/2021	Physical	0.20
UBS ETF MSCI Japan Clmt Prs Algn A JPY	Ireland	IE00BN4Q0X77	Equity	EAA Fund Japan Large-Cap Equity	11/03/2021	Physical	0.20
Invesco MSCI Eurp ExUK ESG Unv Scrnd ETF	Ireland	IE00BMDBMW94	Equity	EAA Fund Europe ex-UK Equity	10/03/2021	Physical	0.16
Invesco MSCI EMU ESG Universal Scrnd ETF	Ireland	IE00BMDBMX02	Equity	EAA Fund Eurozone Large-Cap Equity	10/03/2021	Physical	0.16
Invesco FTSE All Share ESG Climate ETF	Ireland	IE00BN7J5Z03	Equity	EAA Fund Sector Equity Ecology	10/03/2021	Physical	0.12
UBS ETF MSCI EMU Climate Prs Algn A EUR	Ireland	IE00BN4Q0L55	Equity	EAA Fund Eurozone Large-Cap Equity	09/03/2021	Physical	0.18
UBS ETF MSCI Europe Clmt Prs Algn A EUR	Ireland	IE00BN4Q0933	Equity	EAA Fund Europe Large-Cap Blend Equity	09/03/2021	Physical	0.18
UBS ETF MSCI USA Climate Prs Algn A USD	Ireland	IE00BN4Q0602	Equity	EAA Fund US Large-Cap Blend Equity	09/03/2021	Physical	0.12
First Trust Gbl Cap Strn ESG Ldrs ETF A\$	Ireland	IE00BKPSPT20	Equity	EAA Fund Global Large-Cap Blend Equity	09/03/2021	Physical	0.75
UBS ETF Solactive China Tech USD A-acc	Luxembourg		Equity	EAA Fund Sector Equity Technology	05/03/2021	Physical	0.47
ETHetc - ETC Group Physical Ethereum	Germany	DE000A3GMKD7	Miscellaneous	EAA Fund Other	05/03/2021	Physical	
GraniteShares 3x Long NIO Daily ETC	Ireland	XS2193973133	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Short NIO Daily ETC	Ireland	XS2193973216	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares FAANG ETC	Ireland	XS2305050556	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares GAFAM ETC	Ireland	XS2305050630	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares FATANG ETC	Ireland	XS2305050713	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Long FAANG Daily ETC	Ireland	XS2305050804	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Short FAANG Daily ETC	Ireland	XS2305051018	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 1x Short FAANG Daily ETC	Ireland	XS2305051109	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Long GAFAM Daily ETC	Ireland	XS2305051281	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Short GAFAM Daily ETC	Ireland	XS2305051448	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 1x Short GAFAM Daily ETC	Ireland	XS2305051521	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Long FATANG Daily ETC	Ireland	XS2305051877	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Short FATANG Daily ETC	Ireland	XS2305051950	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 1x Short FATANG Daily ETC	Ireland	XS2305052172	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
GraniteShares 3x Shrt Rolls-Royce DI ETC	Ireland	XS2305052255	Alternative	EAA Fund Trading - Leveraged/Inverse Equity	04/03/2021	n/a	
Invesco Global Clean Energy ETF Acc	Ireland	IE00BLRB0242	Equity	EAA Fund Sector Equity Alternative Energy	01/03/2021	Physical	0.60
Invesco MSCI China All Shares Cnct ETF	Ireland	IE00BK80XL30	Equity	EAA Fund China Equity	01/03/2021	Physical	0.35
UBS Clmt Awr Gbl Dev Eq CTB ETF A USD	Ireland	IE00BN4PXC48	Equity	EAA Fund Global Large-Cap Blend Equity	26/02/2021	Physical	0.19
UBS ETF MSCI Eur Scy Rspb ETF A EUR Acc	Luxembourg	LU2206597804	Equity	EAA Fund Europe Large-Cap Blend Equity	26/02/2021	Physical	0.18
UBS ETF MSCI Swd IMI Scy Rp ETF ACHF Acc	Luxembourg	LU2250132763	Equity	EAA Fund Switzerland Equity	26/02/2021	Physical	0.28
FlexShares® Dvlp Mkt Lw Vol Clmt ESG ETF	Ireland	IE00BMYDBG17	Equity	EAA Fund Global Large-Cap Blend Equity	24/02/2021	Physical	
FlexShares® Dvlp Mkt High Dvd ClmtESGETF	Ireland	IE00BMYDBM76	Equity	EAA Fund Global Large-Cap Value Equity	24/02/2021	Physical	
Chimera S&P UAE ETF A AED Acc	Ireland	IE00BKDMN692	Equity	EAA Fund Other Equity	23/02/2021	Physical	1.00
UBS ETF (CH) - SPI® ESG (CHF) A-acc	Switzerland	CH0590186661	Equity	EAA Fund Switzerland Equity	23/02/2021	Physical	0.15
CoinShares Physical Ethereum (ETH)	Jersey	GB00BLD4ZM24	Miscellaneous	EAA Fund Other	23/02/2021	n/a	
UBS ETF S&P 500 ESG ELITE USD A Acc	Ireland	IE00BLSN7P11	Equity	EAA Fund US Large-Cap Blend Equity	18/02/2021	Physical	0.15
JPM BetaBuilders US Treasury Bd0-3MnETF\$	Ireland	IE00BMD8KM66	Fixed Income	EAA Fund USD Government Bond	17/02/2021	Physical	0.07
WisdomTree European Union Bd ETF EUR Acc	Ireland	IE00BMXWRM76	Fixed Income	EAA Fund EUR Government Bond	15/02/2021	Physical	0.16

Source: Morningstar Direct. Data as of 31/03/2021.

Name	Domicile	ISIN	Broad Category Group	Morningstar Category	Inception Date	Replication	KIID Ongoing Charge
L&G ESG Green Bond ETF EUR	Ireland	IE00BMYDMD58	Fixed Income	EAA Fund Global Flexible Bond	11/02/2021	Synthetic	0.25
L&G Hydrogen Economy ETF USD Acc	Ireland	IE00BMYDM794	Equity	EAA Fund Other Equity	10/02/2021	Physical	0.49
Invesco US Municipal Bond ETF Dist	Ireland	IE00BNG70R26	Fixed Income	EAA Fund USD Government Bond	10/02/2021	Physical	0.28
21Shares Polkadot ETP	Switzerland	CH0593331561	Miscellaneous	EAA Fund Other	04/02/2021	n/a	
WisdomTree Cybersecurity ETF USD Acc	Ireland	IE00BLPK3577	Equity	EAA Fund Sector Equity Technology	25/01/2021	Physical	0.45
Xtrackers MSCI USA Comm Srvc ETF 1D	Ireland	IE00BNC1G707	Equity	EAA Fund Sector Equity Technology	21/01/2021	Physical	0.12
Xtrackers NASDAQ 100 ETF 1C	Ireland	IE00BMFKG444	Equity	EAA Fund US Large-Cap Growth Equity	21/01/2021	Physical	0.20
Xtrackers MSCI EMU ESG ETF 1C	Ireland	IE00BNC1G699	Equity	EAA Fund Eurozone Large-Cap Equity	21/01/2021	Physical	0.12
Xtrackers MSCI USA Industrials ETF 1D	Ireland	IE00BCHWNV48	Equity	EAA Fund Sector Equity Industrial Materials	21/01/2021	Physical	0.12
BNPP E JPM ESG EMU Govt Bd IG 3-5Y ETF	Luxembourg	LU2244387457	Fixed Income	EAA Fund EUR Government Bond	21/01/2021	Physical	0.15
CoinShares Physical Bitcoin (BTC)	Jersey	GB00BLD4ZL17	Miscellaneous	EAA Fund Other	19/01/2021	n/a	
L&G ESG USD Corporate Bond ETF	Ireland	IE00BLRPRD67	Fixed Income	EAA Fund USD Corporate Bond	15/01/2021	Physical	0.09
L&G ESG Emerging Markets Corp Bd USD ETF	Ireland	IE00BLRPRF81	Fixed Income	EAA Fund Global Emerging Markets Corporate Bond	15/01/2021	Physical	0.35
KraneShares MSCI All Chn Hlth Cr ETF USD	Ireland	IE00BL6K0S82	Equity	EAA Fund Sector Equity Healthcare	14/01/2021	Physical	0.65
Tabula EUR IG Bd Prs-Algn Clmt ETF € Acc	Ireland	IE00BN4GXL63	Fixed Income	EAA Fund EUR Corporate Bond	08/01/2021	Physical	
Invesco MSCI Pac Ex Jpn ESG Unvs/ScrnETF	Ireland	IE00BMBDMT65	Equity	EAA Fund Pacific ex-Japan Equity	08/01/2021	Physical	0.19
Invesco MSCI Japan ESG Unvrs/ Scrn ETF	Ireland	IE00BMBDMV87	Equity	EAA Fund Japan Large-Cap Equity	08/01/2021	Physical	0.19
GPF Physical Gold ETC	Ireland	XS2265368097	Commodities	EAA Fund Commodities - Precious Metals	07/01/2021	n/a	
GPF Physical Silver ETC	Ireland	XS2265369574	Commodities	EAA Fund Commodities - Precious Metals	07/01/2021	n/a	
GPF Physical Platinum ETC	Ireland	XS2265369731	Commodities	EAA Fund Commodities - Precious Metals	07/01/2021	n/a	
GPF Physical Palladium ETC	Ireland	XS2265370234	Commodities	EAA Fund Commodities - Precious Metals	07/01/2021	n/a	

Source: Morningstar Direct. Data as of 31/03/2021.

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