
Morningstar Direct European ETF Asset Flows Update — Q3 2021

Morningstar Manager Research

12 October 2021

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Key Takeaways

- ▶ The European exchange-traded fund market gathered EUR 32.6 billion of flows in the third quarter, a 26% decrease from the second quarter. Still, flows in the first three quarters of 2021 already surpassed the total annual for 2020 and assets reached an all-time-high of EUR 1.3 trillion.
- ▶ Investors broadly split their preferences between equity and fixed-income ETFs in the third quarter.
- ▶ Flows into environmental, social, and governance ETFs amounted to EUR 13.8 billion, or 42.5% of all money invested in ETFs in the quarter. Assets grew by 11% to EUR 158.3 billion and represent 12.2% of total assets in ETFs in Europe.
- ▶ Strategic-beta ETFs shed EUR 3.6 billion in the third quarter, mostly in value equity factor strategies.
- ▶ Thematic ETFs gathered EUR 1.8 billion in flows, and assets went up slightly to EUR 34 billion.
- ▶ Most ETF providers saw a decline in flows in the third quarter.

Executive Summary

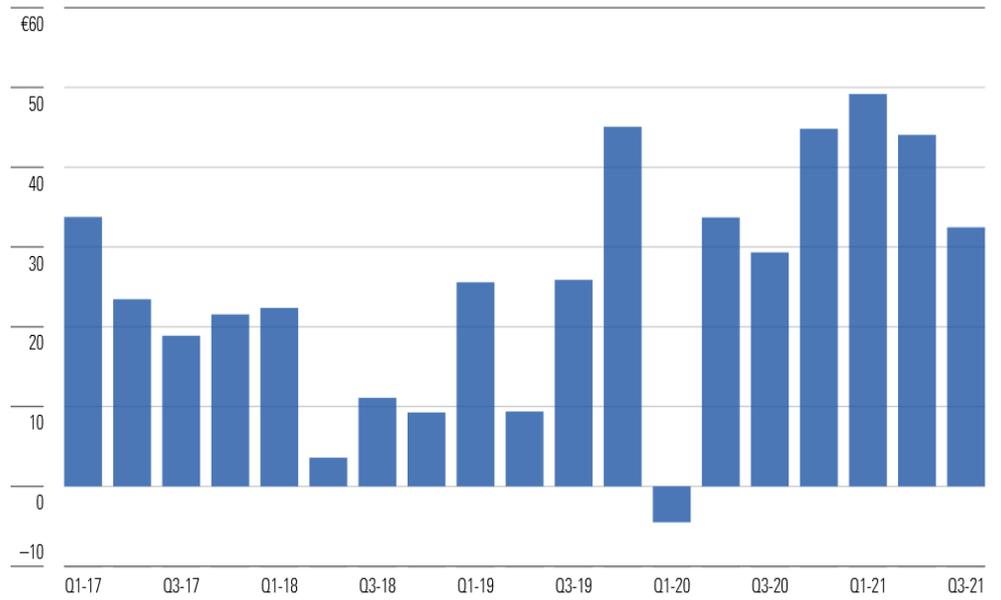
The European ETF market — inclusive of exchange-traded commodities — gathered EUR 32.6 billion of flows in the third quarter. This was a 26% decrease from the EUR 44 billion in the second quarter. However, flows into ETFs in the first three quarters of the year, at EUR 125.7 billion, have already surpassed the total for the whole of 2020. Barring an unexpected sizable dip in flows in the remaining three months, the European ETF market will set a new annual record-high in flows for 2021. Assets under management rose by 4% over the quarter to a few million short of EUR 1.3 trillion.

In terms of asset classes, investors broadly split their preferences between equity and fixed income, with flows of EUR 16.7 billion and EUR 14.7 billion, respectively. There was a noted decrease in flows into equity ETFs compared with the two previous quarters, although assets grew to EUR 876.7 billion from EUR 849.8 billion in the second quarter. Meanwhile, flows into bond ETFs increased to EUR 14.7 billion from EUR 10.2 billion in the second quarter, and assets jumped to EUR 299.2 billion from EUR 282.8 billion. While emerging-markets debt was generally out of favour, investors continued to show firm appetite for Chinese Treasury bonds despite the unfolding liquidity crisis affecting the Evergrande Group.

Flows into ESG ETFs increased slightly in the third quarter to EUR 13.8 billion from EUR 12.5 billion in the second quarter. This accounted for 42.5% of total money invested in ETFs during the period, significantly up from 28.4% in the second quarter. Assets in ESG ETFs increased to EUR 158.3 billion from EUR 143 billion in the second quarter and represent 12.2% of total assets in ETFs in Europe.

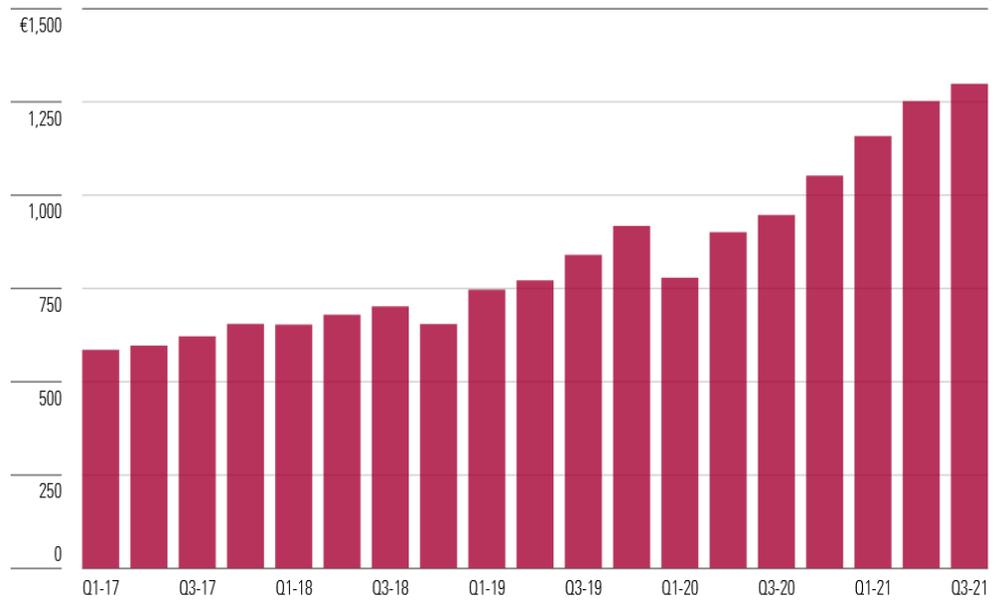
Strategic-beta ETFs saw outflows of EUR 3.6 billion in the third quarter, led by the group of value equity ETFs, which investors had favoured in the previous two quarters.

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



Source: Morningstar Direct. Data as of 30 September 2021.

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



Source: Morningstar Direct. Data as of 30 September 2021.

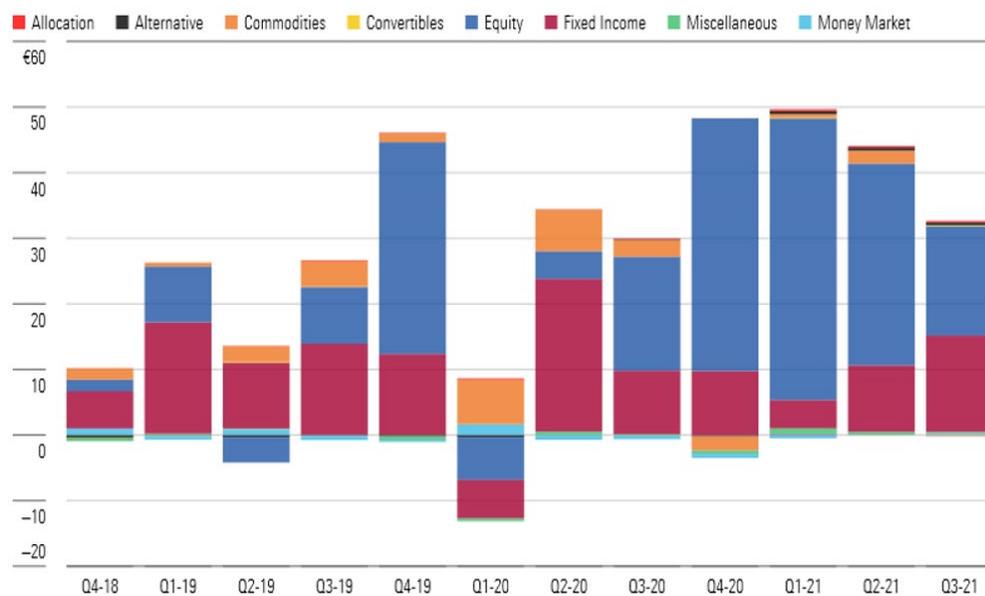
Flows by Broad Asset Class

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

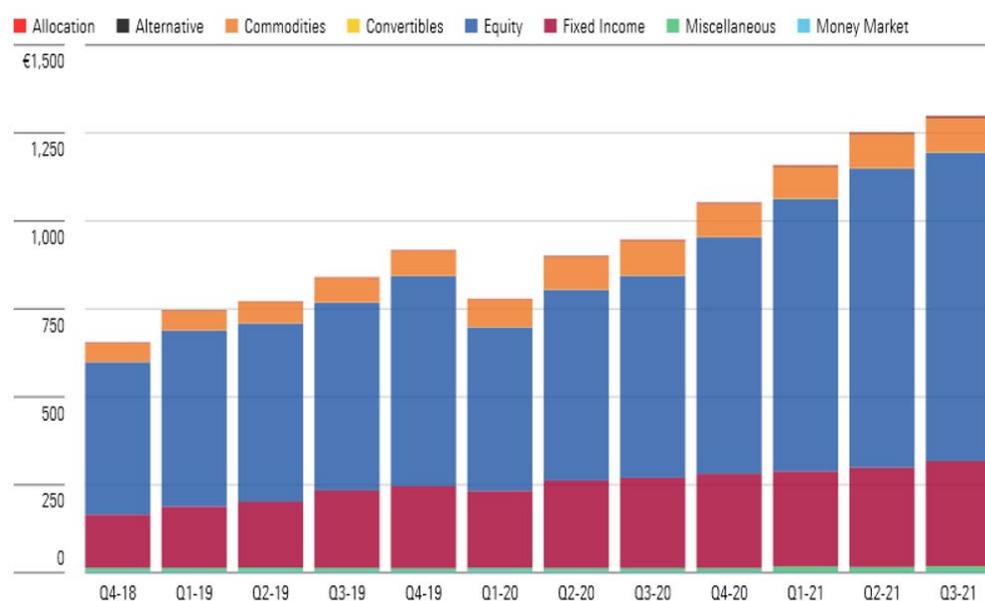
	Net Flows					AUM	
	Jul	Aug	Sep	Q3 2021	Q2 2021	Q3 2021	Q2 2021
Allocation	0.07	0.12	0.05	0.24	0.26	2.7	2.4
Alternative	0.07	0.26	0.10	0.43	0.46	2.8	2.3
Commodities	0.16	0.23	-0.57	-0.19	1.95	97.2	97.2
Convertibles	0.09	0.01	0.03	0.14	0.01	1.6	1.5
Equity	2.76	6.43	7.47	16.67	30.75	876.7	849.8
Fixed Income	6.58	2.88	5.25	14.71	10.16	299.2	282.8
Miscellaneous	0.21	0.06	-0.06	0.21	0.44	15.2	13.2
Money Market	0.00	0.20	0.05	0.25	0.03	3.1	2.9
Unclassified	0.00	0.00	0.00	0.00	0.00	0.1	0.1
Total	9.94	10.20	12.32	32.46	44.05	1,298.6	1,252.1

Source: Morningstar Direct. Data as of 30 September 2021.

Exhibit 4 Europe ETF Market Quarterly Flows by Broad Asset Class (EUR, Billion)



Source: Morningstar Direct. Data as of 30 September 2021.

Exhibit 5 Europe ETF Market Quarterly Assets Under Management by Broad Asset Class (EUR, Billion)

Source: Morningstar Direct. Data as of 30 September 2021.

Equity ETFs

Exhibit 6 Equity ETF Net Flows by Morningstar Category (EUR, Billion)

Top 10	Q3 2021	Bottom 10	Q3 2021
Global Large-Cap Blend Equity	10.49	France Equity	-0.39
US Large-Cap Blend Equity	7.26	Global Large-Cap Value Equity	-0.53
Global Emerging Markets Equity	1.78	Eurozone Large-Cap Equity	-0.61
Sector Equity Technology	1.58	Asia ex-Japan Equity	-0.64
Europe Large-Cap Blend Equity	1.05	Europe Large-Cap Value Equity	-0.71
Sector Equity Healthcare	0.87	UK Mid-Cap Equity	-0.79
Eurozone Mid-Cap Equity	0.59	Sector Equity Financial Services	-0.98
Sector Equity Ecology	0.54	Sector Equity Industrial Materials	-1.10
Japan Large-Cap Equity	0.52	Global Small/Mid-Cap Equity	-1.51
Switzerland Equity	0.47	US Large-Cap Value Equity	-2.17

Source: Morningstar Direct. Data as of 30 September 2021.

Equity ETFs gathered EUR 16.7 billion of inflows in the third quarter, down from EUR 30.8 billion in the second quarter. Flows directed to equity ETFs as a proportion of total money invested in ETFs has been on a declining trend this year. It accounted for 90% of total ETF flows in the first quarter, 70% in the second, and 50% in the third. Assets in equity ETFs increased to EUR 876.7 billion from EUR 849.8 billion in the second quarter, meaning that both new money and capital appreciation had a positive impact overall in the period despite the decline in equity market valuations in September.

In terms of Morningstar Categories, most money was directed to global large-cap blend and US large-cap blend ETFs, with EUR 10.5 billion and EUR 7.3 billion, respectively. The five-top money-gathering funds in the quarter were the mainstream MSCI World and S&P 500 ETFs.

If ETF flows are a good gauge of sentiment, then it could be inferred that the value investing theme may have run its course. After solid interest in the two previous quarters—in fact, even in the latter part of 2020—value ETFs shed money in the third quarter. ETFs in the US large-cap value equity category were the worst hit, with a combined EUR 2.2 billion of outflows in the period, but there was also disinvesting from Europe and global large-cap value propositions.

Exhibit 7 Equity ETF Net Flows by Fund (EUR, Billion)

Top 10	Q3 2021	Bottom 10	Q3 2021
iShares Core MSCI World ETF	2.88	UBS (Lux) FS MSCI Emerging Markets	-0.45
iShares Core S&P 500 ETF	2.43	iShares Edge MSCI Eurp Val Fctr ETF	-0.47
Xtrackers MSCI World ETF	1.15	Vanguard FTSE 250 ETF	-0.48
Invesco S&P 500 ETF	1.03	Invesco Industrials S&P US Sel Sec ETF	-0.50
Vanguard S&P 500 ETF	1.02	Amundi IS MSCI Emerging Markets	-0.59
Vanguard FTSE All-World UCITS ETF	0.79	iShares MSCI World EUR Hedged ETF	-0.68
iShares MSCI ACWI ETF	0.66	iShares Edge MSCI USA Moment Fctr ETF	-1.27
iShares MSCI EM SRI ETF	0.61	iShares MSCI World Small Cap ETF	-1.52
iShares EURO STOXX Small ETF	0.55	Xtrackers S&P 500 Equal Weight ETF	-2.07
Xtrackers ESG MSCI USA UCITS ETF	0.52	iShares Edge MSCI USA Value Factor ETF	-2.34

Source: Morningstar Direct. Data as of 30 September 2021.

Fixed-Income ETFs

Exhibit 8 Fixed-Income ETF Net Flows by Morningstar Category (EUR, Billion)

Top 10	Q3 2021	Bottom 10	Q3 2021
EUR Corporate Bond	2.77	Global Bond	-0.02
RMB Bond - Onshore	2.52	Global Inflation-Linked Bond - USD Hedged	-0.02
Other Bond	2.21	Global Corporate Bond - CHF Hedged	-0.03
USD Corporate Bond	1.07	Global Corporate Bond - GBP Hedged	-0.04
EUR Corporate Bond - Short Term	0.87	Global Bond - USD Hedged	-0.09
EUR Ultra Short-Term Bond	0.83	Global Corporate Bond - EUR Hedged	-0.20
EUR Government Bond - Short Term	0.76	USD High Yield Bond	-0.23
EUR Government Bond	0.76	Global Emerging Markets Corporate Bond	-0.25
Global Bond - GBP Hedged	0.61	Global Emerging Markets Bond	-0.26
USD Inflation-Linked Bond	0.50	Global Emerging Markets Bond - Local Currency	-0.41

Source: Morningstar Direct. Data as of 30 September 2021.

Flows into bond ETFs increased to EUR 14.7 billion from EUR 10.1 billion in the second quarter. Interest in bond ETFs has been on the ascent through 2021 as investors have grown increasingly wary of

building inflationary pressures and the likelihood that this may force central banks to hike interest rates much earlier than anticipated. Assets in bond ETFs grew to EUR 299.2 billion from EUR 282.9 billion in the second quarter, and once again the rise in assets was almost entirely driven by flows rather than capital appreciation. This is hardly surprising in an environment of upward pressure on bond yields and, thus, downward movement on bond prices.

In terms of categories, emerging-markets debt was at a disadvantage. The liquidity problems experienced by the Evergrande Group — China's second-largest property developer — may have played a role against sentiment for the asset class. However, emerging-markets debt, particularly local-currency-denominated, had been shedding money for much of the year as investors priced in the possibility of rising US rates and an appreciating US dollar. More so, the Evergrande factor does not seem to have dented investor interest for Chinese bonds. Quite the contrary, in fact: Onshore renminbi bond ETFs gathered EUR 2.5 billion, further building on the two previous positive quarters. Much of that money continued to be directed to the iShares China CNY Bond ETF, which is now the second-largest fixed-income ETF in Europe and just shy of overtaking the iShares Core Euro Corporate Bond ETF as the largest bond ETF.

Elsewhere, as was the case already in the second quarter, investors showed continued interest in shortening duration. ETFs in the EUR ultra short-term bond category, composed of strategies with average duration below one year, netted EUR 830 million in flows. Investors also poured money into short-dated corporate and government-bond ETFs, which typically come with average duration around the two-year mark.

Exhibit 9 Fixed-Income ETF Net Flows by Fund (EUR, Billion)

Top 10	Q3 2021	Bottom 10	Q3 2021
iShares Core € Corp Bond ETF	1.46	Lyxor Core US TIPS (DR) ETF	-0.17
iShares China CNY Bond ETF	1.19	iShares \$ Treasury Bond 0-1yr ETF	-0.23
iShares China CNY Govt Bond ETF	0.83	iShares US Mortg Backed Secs ETF	-0.27
iShares \$ Treasury Bd 1-3y ETF	0.83	Invesco US Treasury Bond 7-10 Year ETF	-0.29
iShares \$ Treasury Bd 1-3y ETF	0.77	L&G ESG Emerging Markets Corp Bd USD ETF	-0.30
Xtrackers II EUR Corporate Bond ETF	0.60	iShares JPMorgan EM Local Govt Bond ETF	-0.31
iShares \$ High Yld Corp Bd ETF	0.53	iShares JP Morgan \$ EM Bond ETF	-0.35
iShares € Corp Bond 0-3yr ESG ETF	0.38	Invesco US Treasury Bond 7-10 Year ETF	-0.35
PIMCO Euro Short Maturity ETF	0.36	iShares \$ High Yld Corp Bd ETF	-0.42
iShares \$ Floating Rate Bond ETF	0.34	iShares JP Morgan \$ EM Bond ETF	-0.47

Source: Morningstar Direct. Data as of 30 September 2021.

ESG ETFs

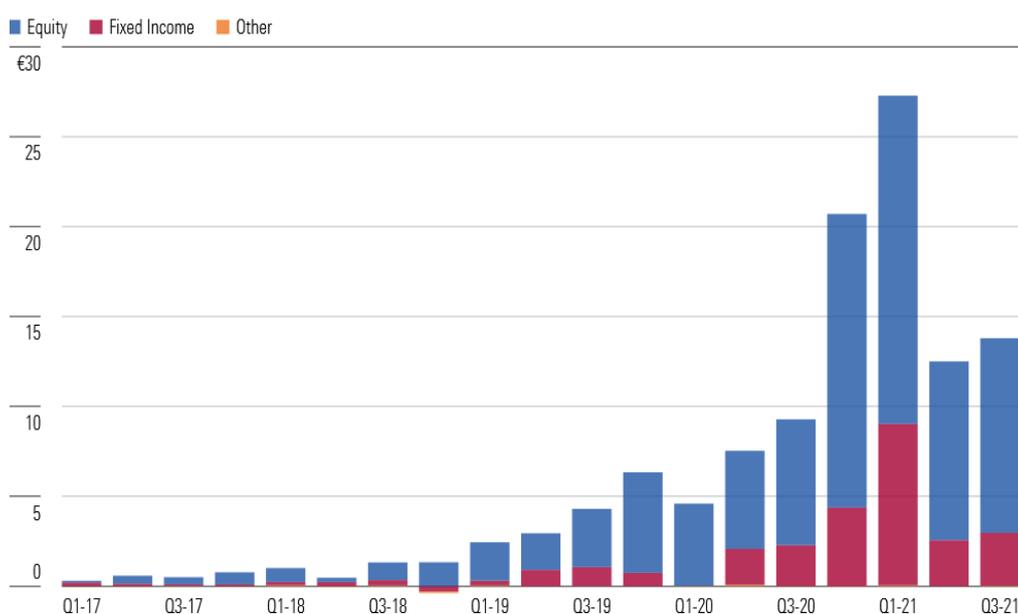
Exhibit 10 European ESG ETF Flows and Assets Under Management (EUR, Billion)

	Net Flows					AUM	
	Jul	Aug	Sep	Q3 2021	Q2 2021	Q3 2021	Q2 2021
Allocation	0.004	0.007	0.004	0.02	0.01	0.05	0.04
Equity	4.23	3.99	2.61	10.83	9.94	126.03	113.86
Fixed Income	1.16	0.99	0.78	2.93	2.56	31.91	28.80
Miscellaneous	0.001	-0.002	0.012	0.01	-0.01	0.27	0.26
Total ESG	5.40	4.99	3.41	13.79	12.50	158.26	142.96
ETF Market Grand Total				32.46	44.05	1,298.60	1,252.12
% ESG				42.5%	28.4%	12.2%	11.4%

Source: Morningstar Direct. Data as of 30 September 2021.

Flows into ESG ETFs amounted to EUR 13.8 billion, slightly up from EUR 12.5 billion in the second quarter. However, this accounted for 42.5% of total flows into ETFs over the period, significantly up from 28.4% in the second quarter. Flows into equity ESG ETFs amounted to EUR 10.8 billion, while those into bond ESG ETFs totalled EUR 2.9 billion.

Exhibit 11 European ESG ETF Flows (EUR, Billion)

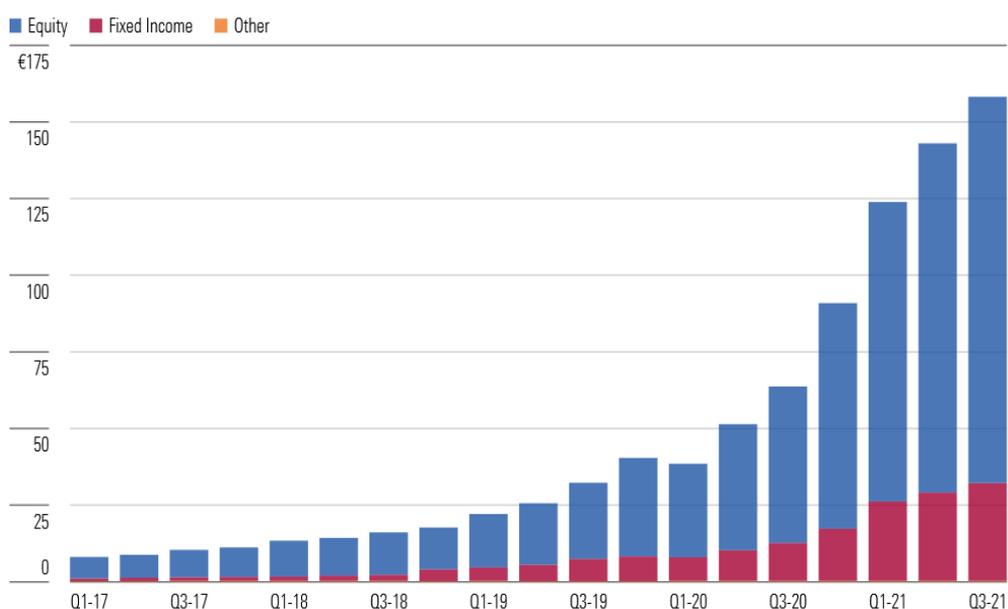


Source: Morningstar Direct. Data as of 30 September 2021.

Assets in ESG ETFs increased to EUR 158.3 billion from EUR 143 billion in the second quarter and already represent 12.2% of total assets invested in the European ETF market, up from 11.4% in the second

quarter. The bulk of assets remains invested in equity ESG ETFs, although the trend for sustainable investing is also making its mark on fixed income.

Exhibit 12 European ESG ETF Assets Under Management (EUR, Billion)



Source: Morningstar Direct. Data as of 30 September 2021.

Strategic-Beta ETFs

Exhibit 13 European Strategic-Beta ETF Flows and Assets Under Management (EUR, Billion)

	Net Flows					AUM	
	Jul	Aug	Sep	Q3 2021	Q2 2021	Q3 2021	Q2 2021
Commodity	-0.16	-0.07	0.03	-0.21	0.02	6.63	6.46
Dividend	-0.12	0.20	-0.06	0.02	0.77	26.19	26.43
Fixed Income	0.72	0.01	0.28	1.01	0.13	4.24	3.19
Fundamentals	0.00	0.00	0.01	0.01	0.02	0.33	0.32
Growth	0.05	0.04	0.03	0.12	0.07	0.91	0.77
Momentum	-1.36	0.03	0.15	-1.17	0.26	5.82	5.54
Multi-Factor	0.00	-0.02	0.08	0.05	0.02	4.84	4.70
Other	-0.18	-0.42	-0.21	-0.81	1.53	21.52	21.90
Quality	0.78	0.31	0.14	1.23	1.21	7.22	5.93
Risk-Oriented	-0.36	0.08	0.07	-0.22	-0.45	7.95	8.05
Value	-2.51	-0.26	-0.90	-3.66	3.74	17.82	20.22
Total Strategic Beta	-3.15	-0.09	-0.39	-3.63	7.31	103.48	103.49
ETF Market Grand Total				32.46	44.05	1,298.60	1,252.12
% Strategic Beta						8.0%	8.3%

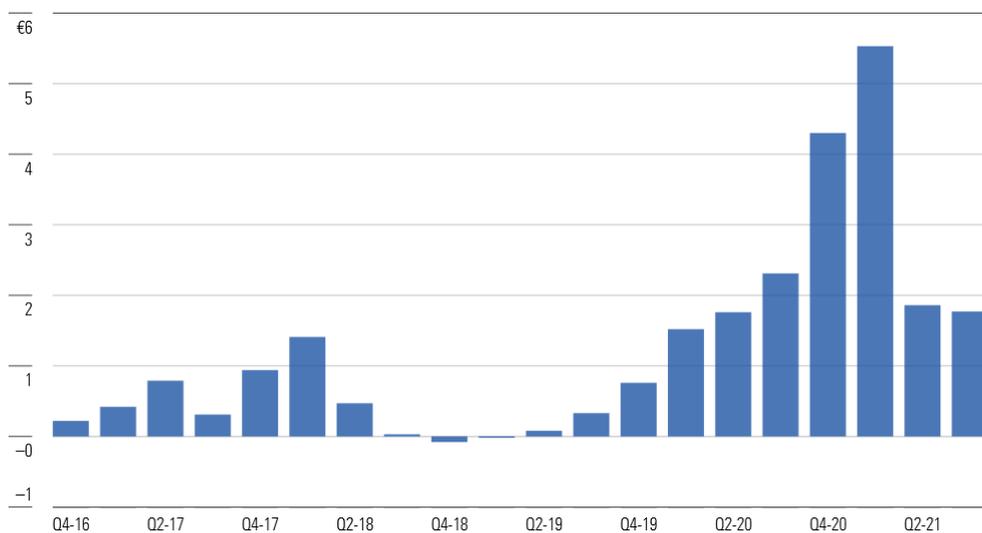
Source: Morningstar Direct. Data as of 30 September 2021.

Strategic-beta ETFs saw outflows of EUR 3.6 billion in the third quarter, putting an end to the good run of the first half of the year when these products gathered EUR 19 billion. More so, outflows in the third quarter were led by the group of value equity ETFs, precisely the strategies that investors had favoured in the previous two quarters. Value equity ETFs shed close to EUR 3.7 billion, almost entirely matching the flows they took in during the second quarter.

Assets in strategic-beta ETFs remained broadly unchanged at just shy of EUR 103.5 billion, but its market share dropped to 8.0% from 8.3% of total assets invested in ETFs in Europe.

Thematic ETFs

Exhibit 14 European Thematic ETF Flows (EUR, Billion)



Source: Morningstar Direct. Data as of 30 September 2021.

Flows into thematic ETFs dropped slightly to EUR 1.8 billion from EUR 1.9 billion in the second quarter. Assets in thematic ETFs went up to a new high of EUR 34 billion from EUR 32.6 billion in the second quarter.

KraneShares CSI China Internet ETF was the top money-gatherer in the third quarter, netting EUR 342 million. iShares Ageing Population ETF and iShares Global Clean Energy ETF followed, with EUR 153 million and EUR 132 million, respectively.

Provider League Table

Exhibit 15 Top 20 European Providers (Ranked by Assets Under Management) (EUR, Billion)

	Net Flows		AUM		Market Share (%)	
	Q3 2021	Q2 2021	Q3 2021	Q2 2021	Q3 2021	Q2 2021
iShares	13.9	21.1	567.7	547.3	43.7%	43.7%
Xtrackers	3.8	5.5	144.0	137.5	11.1%	11.0%
Lyxor	1.1	2.2	94.3	92.4	7.3%	7.4%
UBS	2.0	2.4	82.0	79.6	6.3%	6.4%
Amundi	1.8	2.3	79.0	77.4	6.1%	6.2%
Vanguard	2.6	3.1	71.8	68.2	5.5%	5.4%
State Street	0.8	0.2	52.1	51.2	4.0%	4.1%
Invesco	2.2	2.1	50.3	47.1	3.9%	3.8%
WisdomTree (*)	-0.2	-0.2	23.8	24.1	1.8%	1.9%
HSBC	1.5	0.5	15.9	14.5	1.2%	1.2%
BNP Paribas	0.0	-0.2	13.4	13.2	1.0%	1.1%
Deutsche Borse	0.3	0.6	11.7	11.2	0.9%	0.9%
Deka	0.4	0.3	11.6	11.2	0.9%	0.9%
Legal & General	0.3	0.5	11.4	10.9	0.9%	0.9%
Swisscanto	0.1	0.1	10.6	10.8	0.8%	0.9%
PIMCO	0.4	0.8	9.6	9.1	0.7%	0.7%
JPMorgan	0.5	0.6	6.5	6.0	0.5%	0.5%
Credit Suisse	-0.5	0.3	5.5	5.8	0.4%	0.5%
VanEck	0.4	0.8	5.0	4.7	0.4%	0.4%
Handelsbanken	0.1	-0.2	4.7	4.6	0.4%	0.4%

Source: Morningstar Direct. Data as of 30 September 2021.

(*) ETCs represent 90% of assets under management of Wisdom Tree.

iShares topped the ETF provider league with EUR 13.9 billion of flows in the third quarter, but this was a significant drop from EUR 21.1 billion in the second quarter. In fact, concomitant with the overall ETF market trend, most ETF providers registered a decline in flows in the third quarter. Xtrackers, the second-largest ETF provider in Europe, saw inflows of EUR 3.8 billion, down from EUR 5.5 billion.

iShares retains an unassailable grip on the European ETF market, with a 43.7% share of assets under management, almost matching the combined market share of the next seven providers. ■■■

Annex—New Launches in Q3 2021

Name	Domicile	ISIN	Broad Category Group	Morningstar Category	Inception Date	Replication	KIID Ongoing Charge
21Shares Crypto Basket 10 HODLX ETP	Switzerland	CH1135202179	Miscellaneous	EAA Fund Other	29/09/2021	n/a	
21Shares Crypto Basket EqI Wt HODLV ETP	Switzerland	CH1135202161	Miscellaneous	EAA Fund Other	29/09/2021	n/a	
VanEck Vectors™ New China ESG ETF A \$Acc	Ireland	IE0000H445G8	Equity	EAA Fund China Equity	24/09/2021	Physical	0.60
VanEck Vectors™ ReErth&StratMtlETF\$Acc	Ireland	IE0002PG6CA6	Equity	EAA Fund Sector Equity Precious Metals	24/09/2021	Physical	0.59
FlexShares® Em Mkts Lw Vol Clmt ESG ETF	Ireland	IE00BMYDBN83	Equity	EAA Fund Global Emerging Markets Equity	23/09/2021	Physical	
BNPP Easy Lw Cb 100 Euroz PAB ETF EURAcc	Luxembourg	LU2194448267	Equity	EAA Fund Eurozone Large-Cap Equity	17/09/2021	Physical	0.30
BCHetc - Physical Bitcoin Cash ETC € Acc	Germany	DE000A3GTBU5	Miscellaneous	EAA Fund Other	15/09/2021	Physical	
Amundi Prime Emerging Markets ETF DR C	Luxembourg	LU2300295123	Equity	EAA Fund Global Emerging Markets Equity	14/09/2021	n/a	0.12
VanEck Vectors Polkadot ETN A	Liechtenstein	DE000A3GSUC5	Miscellaneous	EAA Fund Other	13/09/2021	Physical	
VanEck Vectors Solana ETN A	Liechtenstein	DE000A3GSUD3	Miscellaneous	EAA Fund Other	13/09/2021	Physical	
VanEck Vectors TRON ETN A	Liechtenstein	DE000A3GSUE1	Miscellaneous	EAA Fund Other	13/09/2021	Physical	
GS Access UK Gilts 1-10 Yr GBP Dist	Ireland	IE0003MKK4H3	Fixed Income	EAA Fund GBP Government Bond	07/09/2021	Physical	0.07
Cleaner Living ESG-S ETF	Ireland	IE00BMFNWJ02	Equity	EAA Fund Global Large-Cap Blend Equity	07/09/2021	Physical	0.59
Tabula HaitongAsiaex-JpnHYCorp\$BdESGETF\$	Ireland	IE000LZC9NM0	Fixed Income	EAA Fund Asia High Yield Bond	02/09/2021	Physical	0.60
GraniteShares 3x Long Airbus Daily ETC	Ireland	XS2376933375	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Airbus Daily ETC	Ireland	XS2376937442	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long AXA Daily ETC	Ireland	XS2376944224	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short AXA Daily ETC	Ireland	XS2376951781	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long BNP Daily ETC	Ireland	XS2376951948	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short BNP Daily ETC	Ireland	XS2376952243	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long Danone Daily ETC	Ireland	XS2376974304	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Danone Daily ETC	Ireland	XS2376974486	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long L'Oreal Daily ETC	Ireland	XS2376974726	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short L'Oreal Daily ETC	Ireland	XS2376974999	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long LVMH Daily ETC	Ireland	XS2376975020	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short LVMH Daily ETC	Ireland	XS2376975376	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long Safran Daily ETC	Ireland	XS2376975533	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Safran Daily ETC	Ireland	XS2376975616	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long Sanofi Daily ETC	Ireland	XS2376975962	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Sanofi Daily ETC	Ireland	XS2376976341	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Lng Schndr Eltrc DI ETC	Ireland	XS2376976770	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Shrt Schndr Eltrc DI ETC	Ireland	XS2376976853	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Lng STMcrctrns Dly ETC	Ireland	XS2376978982	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Shrt STMcrctrns Dly ETC	Ireland	XS2376979287	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long TtlEnrgs Dly ETC	Ireland	XS2376979790	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	

Source: Morningstar Direct. Data as of 30 September 2021.

Name	Domicile	ISIN	Broad Category Group	Morningstar Category	Inception Date	Replication	KIID Ongoing Charge
GraniteShares 3x Short TtlEnrgs Dly ETC	Ireland	XS2376979873	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long Volkswagen Dly ETC	Ireland	XS2376990417	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Volkswagen DlyETC	Ireland	XS2376991142	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long Palantir Daily ETC	Ireland	XS2377111906	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Palantir DailyETC	Ireland	XS2377112037	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long AMD Daily ETC	Ireland	XS2377112110	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short AMD Daily ETC	Ireland	XS2377112201	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Long Moderna Daily ETC	Ireland	XS2377112466	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
GraniteShares 3x Short Moderna Daily ETC	Ireland	XS2377112540	Miscellaneous	EAA Fund Trading - Leveraged/Inverse Equity	30/08/2021	n/a	
iShares Global Aggt Bd ESG ETF USD Dis	Ireland	IE00U6US100	Fixed Income	EAA Fund Global Bond	27/08/2021	Physical	0.10
WisdomTree Carbon ETC	Jersey	JE00BP2PWW32	Miscellaneous	EAA Fund Other	24/08/2021	n/a	
MSCI World Sm Cp Scilly Rspnb ETF \$ A Acc	Ireland	IE00BKSCBX74	Equity	EAA Fund Global Small/Mid-Cap Equity	19/08/2021	Physical	0.23
Lyxor Corporate Green Bd (DR) ETF EURAcc	Luxembourg	LU2370241684	Fixed Income	EAA Fund Global Corporate Bond	12/08/2021	Physical	0.20
Amundi IS MSCI EM Asia SRI ETF DR \$ (D)	Luxembourg	LU2300294589	Equity	EAA Fund Asia ex-Japan Equity	11/08/2021	Physical	0.25
Lyxor SG Eurp Qual Inc NTR DR ETF € Acc	Luxembourg	LU0959210781	Equity	EAA Fund Europe Equity Income	05/08/2021	Physical	0.30
MSCI EM Clmt Paris Algned ETF A USD Acc	Ireland	IE00BN4Q1675	Equity	EAA Fund Global Emerging Markets Equity	05/08/2021	Physical	0.23
iShares MSCI Global Semicondctrs ETF\$Acc	Ireland	IE00I8KRLL9	Equity	EAA Fund Sector Equity Technology	05/08/2021	Physical	0.35
HSBC MSCI Europe Clmt Paris Algned ETFEUR	Ireland	IE00BP2C0316	Equity	EAA Fund Europe Large-Cap Blend Equity	05/08/2021	Physical	0.15
MSCI ACWI Clmt Paris Algned ETF A USD Acc	Ireland	IE00BN4Q0P93	Equity	EAA Fund Global Large-Cap Blend Equity	04/08/2021	Physical	0.22
HSBC MSCI USA Clmt Paris Aligned ETF USD	Ireland	IE00BP2C1S34	Equity	EAA Fund US Large-Cap Blend Equity	03/08/2021	Physical	0.12
Invesco Solar Energy ETF	Ireland	IE00BM8QRZ79	Equity	EAA Fund Sector Equity Alternative Energy	02/08/2021	Physical	0.69
Purpose Enterprise Sftwr ESG-S ETF \$Acc	Ireland	IE00BMQ8YQ50	Equity	EAA Fund Sector Equity Technology	28/07/2021	Physical	0.59
iShares MSCI EMU Paris-Algned ClmtETF€Acc	Ireland	IE00BL6K8D99	Equity	EAA Fund Eurozone Large-Cap Equity	27/07/2021	Physical	0.15
iShares MSCI Eurp Paris-AlgnedClmtETF€Acc	Ireland	IE00BL6K8C82	Equity	EAA Fund Europe Large-Cap Blend Equity	27/07/2021	Physical	0.15
MSCI EMU ESG Universal Low CarbonSelETF A	Ireland	IE00BNC0M913	Equity	EAA Fund Eurozone Large-Cap Equity	22/07/2021	Physical	0.15
MSCI Japan ESG Universal Low CarbSelETF A	Ireland	IE00BNC0MD55	Equity	EAA Fund Japan Large-Cap Equity	21/07/2021	Physical	0.17
MSCI USA ESG Universal Low CarbonSelETF A	Ireland	IE00BNC0M350	Equity	EAA Fund US Large-Cap Blend Equity	20/07/2021	Physical	0.12
MSCI Europe ESG Universal Lw CarbSelETF A	Ireland	IE00BNC0M681	Equity	EAA Fund Europe Large-Cap Blend Equity	20/07/2021	Physical	0.12
Invesco S&P 500 Low Volatility ETF	Ireland	IE00BKW9SX35	Equity	EAA Fund US Large-Cap Blend Equity	14/07/2021	Physical	0.25
Rize Environmental Impact 100 ETF	Ireland	IE00BLRPRR04	Equity	EAA Fund Sector Equity Ecology	14/07/2021	Physical	0.55
L&G Quality Equity Div ESG Excl EM ETF	Ireland	IE00BMYDMC42	Equity	EAA Fund Global Emerging Markets Equity	13/07/2021	Physical	0.45
FinEx Video Gaming and eSports ETF USD	Ireland	IE00BNYK7W79	Equity	EAA Fund Sector Equity Technology	07/07/2021	Physical	0.98
Invesco MSCI Em Mkts ESG Unvsl Scrnd ETF	Ireland	IE00BMD8MY19	Equity	EAA Fund Global Emerging Markets Equity	07/07/2021	Physical	0.19
Invesco USD High Yield Corp Bd ESG ETF	Ireland	IE00BJP5NL42	Fixed Income	EAA Fund USD High Yield Bond	07/07/2021	Physical	0.25
WisdomTree Enh Cmd ex-Agr ETF € H Acc	Ireland	IE00BDVNVN63	Commodities	EAA Fund Commodities - Broad Basket	07/07/2021	Synthetic	0.35
HSBC MSCI World Clmt Paris Algned ETF USD	Ireland	IE00BP2C1V62	Equity	EAA Fund Global Large-Cap Blend Equity	07/07/2021	Physical	0.18
SEBA Polkadot ETC	Switzerland	CH1113516871	Miscellaneous	EAA Fund Other	06/07/2021	n/a	
L&G Multi-Strategy Enhanced Cmdts ETF	Ireland	IE00BFXR6159	Commodities	EAA Fund Commodities - Broad Basket	05/07/2021	Synthetic	0.30
AuAg ESG Gold Mining ETF	Ireland	IE00BNTWR89	Equity	EAA Fund Sector Equity Precious Metals	02/07/2021	Physical	0.60
iShares MSCI Wld Paris-Algned ClmtETF\$Acc	Ireland	IE00BMCX7W70	Equity	EAA Fund Sector Equity Ecology	22/04/2021	Physical	0.20

Source: Morningstar Direct. Data as of 30 September 2021.

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