

THE SWISS STOCK EXCHANGE

ETF Market Report

4th Quarter of 2021

Number of the Quarter

394,222

Number of ETF transactions on the Swiss Stock Exchange in Q4 2021

Highest issuer market share

38.36%

UBS

42

Number of New Listings in the 4th Quarter of 2021

Best Performance in the 4th Quarter of 2021

21.44%

ISHARES MSCI GLB SEMICNDCT A (SEMI)

1,272.12 Mio.

Top Turnover Single ETF

Volume of most-traded product in Q4 2021 UBS FUND MSCI ACWI SF H-USD (ACWIU)

Change in favorites

The global equity index rose by 8.11% in the fourth quarter, with most country sub-indices recording a positive market development. Despite the continuing pandemic, record inflation, and impending interest rate hikes, US equities in particular had an excellent year. The S&P 500® achieved 70 new records in the past year as it moved toward a performance of 29%. Over the past three months, the MSCI USA posted an increase of 10%. While up until October cyclical securities had occupied the leading positions, from November onward it was primarily large-cap defensive stocks that were sought after by investors. This development benefited the Swiss stock market. It achieved the best quarterly performance in Europe and advanced to the upper middle tier when compared internationally. French equities were also in demand on the Old Continent, whereas German equities continued to face difficulties. Among the emerging markets, there were only a few winners. China, measured by the MSCI China, lost further ground with a decline of 21.66% in 2021. The subliminal increase in caution particularly benefited the food and healthcare sectors, which stood out with above-average gains. Among the three Swiss index heavyweights Nestlé, Roche, and Novartis, the registered share of the food multinational posted the strongest increase at 13.08% in the final quarter.

The favorable stock market conditions also spread to trade on the ETF market. At the end of the fourth quarter, the number of trades was 29.73% higher than after the first nine months and 3.62% above the previous year's level. The annual increase was entirely attributable to strong growth

ETF Turnover Development



Source: Swiss Stock Exchange

in ticket sizes of less than CHF 10,000, which generated an increase of 21.98%. With 42 newly listed products between October and December, the existing range was expanded with attractive new ETFs. The focus remained on sustainability, both for bonds and for equities. In addition, a wide range of specialty funds from the provider Global X were listed. At the end of the year, the number of ETFs traded on SIX Swiss Exchange came to 1,561. Due to adjustments, this was five fewer than at the end of the previous quarter despite the new additions.

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ETF Market on the Swiss Stock Exchange

1.1 ETF Turnover and Number of Trades

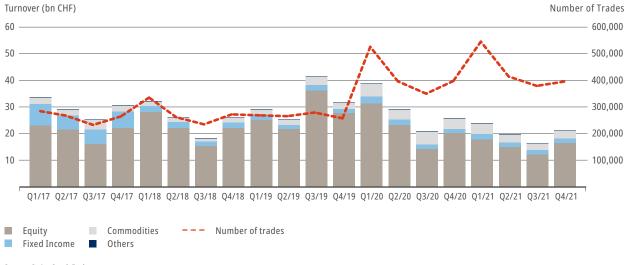
Total turnover in the fourth quarter was 29.67% higher than in the previous quarter and 17.96% lower than the previous year's value. All asset classes with the exception of bonds increased their turnover in the final quarter of the year. The greatest increase was recorded by equity ETFs at 35.93%, followed by commodity ETFs, which rose by 21.19%. Equities remained the most popular category with a 78.08% share of total turnover (up 3.60%). Commodities still came in second place with a share of 13.76% (down 0.96%). They have now considerably outpaced bonds, which accounted for 7.75% (down 2.59%). Persistently low interest rates are still diminishing the appeal of this asset category. Investors are continuing to focus on equities, sometimes supplemented by commodities. These two categories still offer the best return opportunities.

In the fourth quarter, the list of the top 20 most-traded ETFs was headed by the ETFs from UBS based on the MSCI ACWI with Developed Markets and hedged in the currencies USD, EUR, and CHF, followed by the ETF CRB from Lyxor based on the Refinitiv/CoreCommodity CRB Total Return Index, the EPAB from Lyxor, which was launched on 8 October 2020 and tracks the S&P Eurozone LargeMidCap Net Zero 2050 Paris-Aligned ESG NTR Index, and the ETF ZGLD from ZKB based on physically backed gold. With regard to topics, finance ETFs performed well. ETFs based on US, European, and Swiss equity indices were also in demand.

Top-20 Most Traded ETFs

Product	Turnover (mn CHF)	Trend
UBS FUND MSCI ACWI SF H-USD	1,272.12	^
UBS FUND MSCI ACWI SF H-CHF	1,006.44	1
UBS FUND MSCI ACWI SF H-EUR	860.67	^
Lyxor T&R/CoreCommo CRB - Acc	561.39	1
Lyxor Net Zero 2050 S&P	491.48	^
ZKB GOLD ETF	398.89	1
iSh Core S&P500 USD Acc	354.75	^
Lyxor STOXX EU 600 Banks	305.49	$\mathbf{\Psi}$
iSh Core SPI (CH) CHF Dis	304.06	^
Invesco EQQQ	297.15	1
Lyxor MSCI AC APEJ - Acc	279.73	^
LYXOR ETF WORLD FINANCIALS	253.50	$\mathbf{\Psi}$
iSh Nasdaq 100 USD Acc	228.10	^
LYXOR S&P 500 UCITS ETF	202.81	^
UBSETF SMI CHF DIS	194.70	4
LYX ETF EURO STOXX 50 (DR) DIS	188.84	1
UBS ETF ACWI SRI USD ACC	184.62	^
iSh Core MSCI Wrld USD Acc	179.91	1
CSIF MSCI USA ETF B USD	179.17	1
UBSETF SPI CHF DIS	176.71	1

Source: Swiss Stock Exchange



ETF Market on the Swiss Stock Exchange

1.2 Top-10 - Selected Changes in the Overall Market

The best performance in CHF in the fourth quarter was achieved by the ETF SEMI from iShares at 21.44%. This fund is based on the ICE Semiconductor Total Return Index. In second place was the ETF SMHV from the issuer VanEck based on the MVIS US Listed Semiconductor 10% Capped Index, which posted an increase of 18.28%. Both ETFs benefited from the continuing shortage of semiconductors. ETFs based on US technology stocks remained in demand, headed by the ETF XLKS from Invesco based on the S&P Select Sector Capped 20% Technology Index, which rose by 14.13% in the fourth quarter.

The topics of retail, education, travel, cannabis, leveraged short ETFs based on the SMI and the DAX, and certain emerging markets, particularly China, were among the losers in the fourth quarter. The biggest decline at 25.61% was recorded by the ETF IBUY from Amplify based on the EQM

Online Retail Index, followed by the ETF LERN from Rize ETF based on the Foxberry HolonIQ Education Tech & Digital Learning Index. Also heading south was the ETF LYSSL from Lyxor, which is doubly leveraged on falling share prices in the Swiss blue-chip stock market indicator SMI.

The highest numbers of trades in the fourth quarter, in descending order, were attributable to the ETFs CSNDX (Nasdaq 100), CHSPI (SPI), and CSSPX (S&P 500). These were followed by the most-traded ETF on real estate funds, SRECHA. In contrast to the ETFs ranking above it, however, SRECHA saw considerably fewer trades than in the previous quarter. In fifth place was the ETF INRG, which reflects the yield of the S&P Global Clean Energy Index. Among the commodity ETFs, the ETF ZGLD based on physical gold held by ZKB once again recorded the most tickets.

Top-10 ETFs Best Performance

Product	Symbol	Performance	Trend
ISHARES MSCI GLB SEMICNDCT A	SEMI	21.44	1
VANECK SEMICONDUCTOR ETF	SMHV	18.28	1
INVESCO US TECHNOLOGY S&P	XLKS	14.13	1
ISHARES S&P 500 IT SECTOR	IUIT	13.84	1
SPDR S&P US TECH SELECT	SXLK	13.34	1
X MSCI USA INFORMATION TECH	XUTC	13.01	1
INVESCO US CONS DISC S&P SEC	XLYS	12.23	1
UBSETF S&P 500 ESG H-CHF ACC	5ESGS	11.96	1
LYXOR MSCI WORLD IT	LYTNOW	11.68	1
UBS ETF MSCI USA SRI H,CHF A	USSRIC	11.52	↑

Source: Bloomberg

Top-10 ETFs Worst Performance

Product	Symbol	Performance	Trend
HAN GLB ONLINE RETAIL UCITS	IBUY	-25.61	\Psi
RIZE EDUCATION TECH ETF	LERN	-21.15	$\mathbf{\Psi}$
LYXOR SMI DAILY -2X INVERSE	LYSSL	-20.25	ullet
RIZE MED CANNABIS UCITS ETF	FLWR	-18.77	$\mathbf{\Psi}$
EM INTRNET & ECOMM UCITS ETF	EMQQ	-16.05	\
LYXOR EURSTX600 TRVL&LEISR	TRVD	-14.99	$\mathbf{\Psi}$
LYXOR DAILY SHORTDAX X2	LYDSD	-13.93	\
LYXOR CHINA ESG LEADER-USD	LYASC	-12.41	$\mathbf{\Psi}$
LYXOR CHINA ESG LEADER-ACC	LYASI	-12.26	\
WT CLOUD COMPUTING USD ACC	WCLD	-12.01	$\mathbf{\Psi}$

Source: Bloomberg

Top-10 ETFs Number of Trades (Tickets)

Product	Symbol	No. of Trades	Trend
iSh Nasdaq 100 USD Acc	CSNDX	9,177	1
iSh Core SPI (CH) CHF Dis	CHSPI	7,289	V
iSh Core S&P500 USD Acc	CSSPX	7,120	1
UBSETF SXI RE FUNDS CHF DIS	SRECHA	6,868	V
iSh Glob Clean Enrgy USD Dis	INRG	6,351	1
Vanguard All World ETF Dist	VWRL	5,253	1
iSh Swiss Div (CH) CHF Dis	CHDVD	5,188	4
ZKB GOLD ETF	ZGLD	5,152	1
CSIF USSMC ESG ETF B USD	USSMC	5,091	1
Invesco EQQQ	EQQQ	4,902	1

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ETF Market on the Swiss Stock Exchange

1.3 Turnover by Product Provider

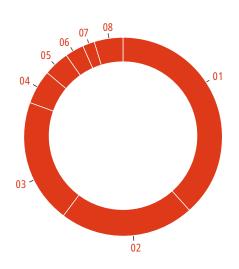
The turnover ranking by issuer was again led by UBS in the fourth quarter. Its relative share increased by 5.63% to 38.36%. They were followed unchanged by BlackRock/iShares, Lyxor and ZKB. The share of total turnover attributable to these four issuers came to 86.25% in the final quarter of the year (Q3 2021: 83.76%). The turnover of the

other 24 providers remained below the one-billion mark. Among the smaller providers, Credit Suisse and Xtrackers stood out positively in the fourth quarter in terms of absolute growth in turnover, while SPDR ETFs and Legal & General ETFs faced the biggest declines in turnover.

ETF Turnover by Product Provider

Issuer	Products	Turnover (mn CHF)	Market Share	Trend
UBS-ETF	332	7,937.73	38.36	1
iShares	302	4,563.40	22.06	V
Lyxor	191	4,168.91	20.15	1
ZKB ETFs	34	1,174.53	5.68	V
Invesco	94	882.66	4.27	Ψ
Xtrackers	96	607.00	2.93	1
Credit Suisse Index Fund	9	408.39	1.97	^
SPDR ETF	83	244.32	1.18	$\mathbf{\Psi}$
Vanguard	35	162.07	0.78	Ψ
Amundi	69	121.75	0.59	$\mathbf{\Psi}$
HSBC	43	65.03	0.31	V
Raiffeisen	8	62.44	0.30	1
WisdomTree	47	53.89	0.26	1
Legal & General	26	48.61	0.24	V
Van Eck Global	23	43.28	0.21	\
Ossiam	22	37.52	0.18	1
Tabula	1	17.89	0.09	1
Fidelity	23	16.20	0.08	1
BNP Paribas	28	16.00	0.08	\
JPMorgan	28	15.41	0.07	V
Franklin Templeton	19	10.63	0.05	\
Rize UCITS ICAV	4	8.42	0.04	V
Pimco	16	7.64	0.04	V
China Post Global	3	7.45	0.04	1
HANetf	8	7.06	0.03	V
Global X ETFs	13	1.23	0.01	1
Goldman Sachs	4	1.12	0.01	Ψ
Total	1,561	20,690.60	100.00	Ψ

Source: Swiss Stock Exchange



01 38,36 % UBS-ETF
02 22,06 % iShares
03 20,15 % Lyxor
04 5,68 % ZKB ETFS
05 4,27 % Invesco
06 2,93 % Xtrackers
07 1,97 % SPDR ETF
08 4,58 % other issuers

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ETF Market on the Swiss Stock Exchange

1.4 Top-5 Selected Changes per Asset Class

Equity Developed Market

Product	Turnover (mn CHF)	Trend
UBS FUND MSCI ACWI SF H-USD	1 272	1
UBS FUND MSCI ACWI SF H-CHF	1 006	1
UBS FUND MSCI ACWI SF H-EUR	861	1
Lyxor Net Zero 2050 S&P	491	1
iSh Core S&P500 USD Acc	355	^

Source: Swiss Stock Exchange

Fixed Income & Money Market

Product	Turnover (mn CHF)	Trend
iSh Core CorpBnd (CH) CHF Dis	129	1
iSh GovBnd 1-3y EUR Acc	99	1
UBSETF EU LiqCorSust EUR ACC	90	1
Lyxor Smart Overnight Return	76	1
LYX EMTS HR MWE GTBD ACC TH	50	1

Source: Swiss Stock Exchange

Equity Emerging Market

Product	Turnover (mn CHF)	Trend
LYXOR MSCI AC APEJ - ACC	280	1
iSh Core MSCI EM IMI USD Acc	99	$\mathbf{\Psi}$
UBSETF MSCI EM USD ACC	62	^
Lyxor MSCI Emerging Markets	50	1
iSh MSCI EM USD Dis	44	1

Source: Swiss Stock Exchange

Commodities

Product	Turnover (mn CHF)	Trend
LYXOR T&R/CORECOMMO CRB - ACC	561	1
ZKB GOLD ETF	399	1
ZKB GOLD ETF (USD)	164	1
UBSETF GOLD USD DIS	127	Ψ
ZKB GOLD ETF HEDGED (CHF)	101	1

Source: Swiss Stock Exchange

Equity Style / Strategy / Themes

Product	Turnover (mn CHF)	Trend
Lyxor STOXX EU 600 Banks	305	$\mathbf{\Psi}$
LYXOR ETF WORLD FINANCIALS	253	$\mathbf{\Psi}$
Lyxor STOXX EU 600 Oil & Gas	142	1
iSh SMIM (CH) CHF Dis	135	1
UBSETF SMIM CHF DIS	133	$\mathbf{\Psi}$

Source: Swiss Stock Exchange

Volatility

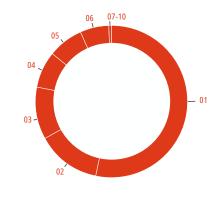
Product	Turnover (mn CHF)	Trend
iSh Edg MSCI Wrld MinVol Acc	3	4
iSh Edg S&P500 MinVol Acc	2	1
iSh Edg MSCI EM MinVol Acc	1	1
UBSETF FAC US LO VOL USD DIS	1	1
MSCI World Minimum Volatility	1	1

ETF Market on the Swiss Stock Exchange

1.5 Trading Details

Turnover by Asset Classes

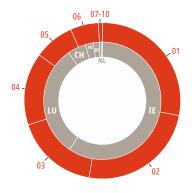
	Asset Class	Absolute	Change	Turnover (mn)	Trend
1	Equity Developed Markets	53.42%	-24%	11,053.13	Ψ
2	Commodities	13.76%	-21%	2,847.31	$\mathbf{\Psi}$
3	Equity Themes	11.02%	16%	2,280.80	1
4	Fixed Income	7.74%	-73%	1,601.82	$\mathbf{\Psi}$
5	Equity Style / Strategy	7.39%	-12%	1,528.92	Ψ
6	Equity Emerging Markets	6.21%	-46%	1,285.20	$\mathbf{\Psi}$
7	Funds	0.40%	16%	83.14	1
8	Volatility	0.04%	-93%	7.86	$\mathbf{\Psi}$
9	Money Market	0.01%	-97%	2.24	V
10	Other	0.00%	-86%	0.17	$\mathbf{\Psi}$
	Total	100.00%		20,690.60	



Source: Swiss Stock Exchange

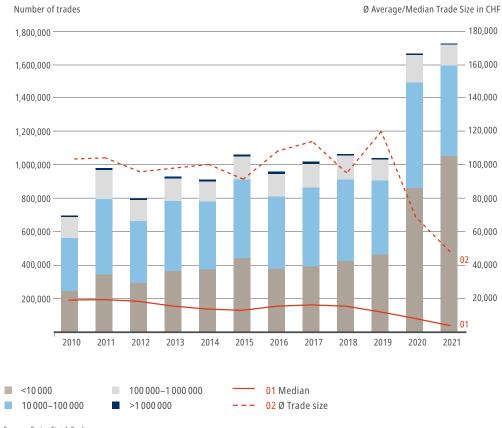
Number of ETs on the Swiss Stock Exchange by Asset Class

	Asset Class	Absolute	Change	Turnover (mn)	Trend
1	Equity Developed Markets	28.32%	-3%	442	$\mathbf{\Psi}$
2	Fixed Income	24.54%	-2%	383	V
3	Equity Themes	17.17%	9%	268	1
4	Equity Style / Strategy	15.18%	-3%	237	Ψ
5	Equity Emerging Markets	8.20%	-2%	128	$\mathbf{\Psi}$
6	Commodities	5.83%	3%	91	1
7	Volatility	0.58%	0%	9	\rightarrow
8	Money Market	0.13%	0%	2	\rightarrow
9	Funds	0.06%	0%	1	\rightarrow
	Total	100.00%		1,561	



^{*}Some fungible ETFs (same ISIN) are tradable in multiple currencies. They are accordingly counted more than once.

2.1 Trading Details (Breakdown of Respective Ticket Size)



2.2 Number of ETFs on the Swiss Stock Exchange by Market Maker (During the Quarter)

Name	ETFs
Flow Traders B.V.	1,204
Société Générale	949
Optiver VOF	675
Goldenberg Hehmeyer LLP	318
BNP Paribas	265
UBS AG	194
Finovesta GmbH	181
Susquehanna	134

Name	ETFs
Virtu Financial Ireland Ltd	73
Deutsche Bank AG London Branch	45
Zürcher Kantonalbank	34
Credit Suisse International	9
Raiffeisen Schweiz Genossenschaft	8
RBC Europe Limited	7
Credit Suisse AG	6
Morgan Stanley	3

Source: Swiss Stock Exchange

Spread-Monitor (Tightest Spreads)

Product	Ticker	TER	Ø Bid Ask Spread (%)
LYXOR SMART OVERNIGHT RETURN	SMOR	0.05	0.03
ISHARES EUR GOVT 1-3YR	IBGS	0.20	0.03
ISHARES EURO GOVT 3-5Y	IBGX	0.20	0.04
X DAX	XDAX	0.09	0.05
VANG FTSE AW USDD	VWRL	0.22	0.05
X S&P500 SWAP	XSPX	0.15	0.05
ISHARES US TREAS 0-1YR USD A	IB01	0.07	0.05
ISHARES EURO GOVT 5-7YR	IEGY	0.20	0.06
ISHARES USD TRSRY 1-3Y USD A	IBTA	0.07	0.06
X EURO STOXX 50 1C	XESC	0.09	0.06
ISHARES DIVDAX UCITS ETF DE	EXSB	0.31	0.06
ISHARES CORE DAX DE EUR ACC	DAXEX	0.16	0.06
ISHARES TRSY 1-3YR USD ACC B	CSBGU3	0.07	0.06
ISHARES EURO ULTRASHORT BOND	ERNE	0.09	0.06
ISHARES CORE MSCI EUROPE ACC	IMEA	0.12	0.06
ISHARES EURO CORP 1-5YR	SE15	0.20	0.06
ISHARES CORE S&P 500	CSSPX	0.07	0.06
SPDR BBG 1-3MO US TRES USDA	TBIL	0.10	0.07
ISHARES NASDAQ 100 USD ACC	CSNDX	0.33	0.07
SPDR BBG 1-3 US TREASURY	TRS3	0.15	0.07

Source: Bloomberg

2.3 New Listings in the Quarter

First Trading Day	Product	Symbol	Currency M	lanagment Fee	Market Maker
23.12.2021	HSBC Bloomberg EUR Sustainable Corporate Bond UCITS ETF	HEUC	EUR	0.18%	Goldenberg Hehmeyer LLP, Société Générale
23.12.2021	HSBC Bloomberg USD Sustainable Corporate Bond UCITS ETF	HUDC	USD	0.18%	Goldenberg Hehmeyer LLP, Société Générale
13.12.2021	Invesco MSCI Europe ESG Climate Paris Aligned UCITS ETF	PAEU	EUR	0.16%	Société Générale
13.12.2021	Invesco MSCI Japan ESG Climate Paris Aligned UCITS ETF	PAJP	USD	0.19%	Société Générale
13.12.2021	Invesco MSCI USA ESG Climate Paris Aligned UCITS ETF	PAUS	USD	0.09%	Société Générale
13.12.2021	Invesco MSCI World ESG Climate Paris Aligned UCITS ETF	PAWD	USD	0.19%	Société Générale
09.12.2021	GLOBAL X RENEWABLE ENERGY PRODUCERS UCITS ETF - USD Acc	RNRG	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
08.12.2021	VanEck Vectors Smart Home Active UCITS ETF	CAVE	CHF	0.85%	Société Générale
07.12.2021	iShares Global Aggregate Bond ESG UCITS ETF CHF Hedged (Acc)	SHIR	CHF	0.10%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X AUTONOMOUS & ELECTRIC VEHICLES UCITS ETF-USD Acc	DRVE	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X CLEANTECH UCITS ETF - USD Acc	CTEK	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X CLOUD COMPUTING UCITS ETF - USD Acc	CLOU	CHF	0.55%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X CYBERSECURITY UCITS ETF - USD Acc	BUGU	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X E-COMMERCE UCITS ETF - USD Acc	EBIZ	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X FINTECH UCITS ETF - USD Acc	FINX	CHF	0.60%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X GENOMICS & BIOTECHNOLOGY UCITS ETF - USD Acc	GNOM	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X INTERNET OF THINGS UCITS ETF - USD Acc	SNSR	CHF	0.60%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X ROBOTICS & ARTIFICIAL INTELLIGENCE UCITS ETF-Acc	BOTZ	CHF	0.50%	Goldenberg Hehmeyer LLP, Société Générale
06.12.2021	GLOBAL X U.S. INFRASTRUCTURE DEVELOPMENT UCITS ETF-USD Acc	PAVE	CHF	0.47%	Goldenberg Hehmeyer LLP, Société Générale
24.11.2021	HSBC MSCI Japan Climate Paris Aligned UCITS ETF	HPJP	USD	0.18%	Goldenberg Hehmeyer LLP, Société Générale
22.11.2021	Invesco NASDAQ-100 ESG UCITS ETF Acc	NESG	USD	0.25%	Flow Traders B.V.
18.11.2021	VanEck Vectors New China ESG UCITS ETF	CNEW	CHF	0.60%	Société Générale
18.11.2021	VanEck Vectors Rare Earth and Strategic Metals UCITS ETF	REMX	CHF	0.59%	Société Générale
17.11.2021	L&G Digital Payments UCITS ETF - USD Accumulating ETF	DPAY	CHF	0.49%	Flow Traders B.V.
17.11.2021	L&G ESG Emerging Markets Corporate Bond (USD) UCITS E	EMAU	CHF	0.35%	Flow Traders B.V.
17.11.2021	L&G India INR Goverment Bond UCITS ETF	TIGR	CHF	0.39%	Flow Traders B.V.
17.11.2021	L&G Multi-Strategy Enhanced Commodities UCITS ETF	ENCO	CHF	0.30%	Flow Traders B.V.
17.11.2021	SPDR Bloomberg Barclays China Treasury Bond UCITS ETF	CHNT	USD	0.19%	Flow Traders B.V.
16.11.2021	JPM USD Corp Bd Research Enh Index UCITS ETF-EUR Hdg(acc)	JRUE	EUR	0.19%	Goldenberg Hehmeyer LLP
08.11.2021	WT EM ex-State-Owned Enterprises ESG Screened UCITS ETF	XSOE	USD	0.32%	Société Générale
05.11.2021	Raiffeisen ETF - Solid Gold Resp. Sourced & Traceable A CHF	RGRT	CHF	0.31%	Raiffeisen Schweiz Genossenschaft
05.11.2021	Raiffeisen ETF - Solid Gold Resp. Sourced & Traceable A USD	RGRTU	USD	0.31%	Raiffeisen Schweiz Genossenschaft

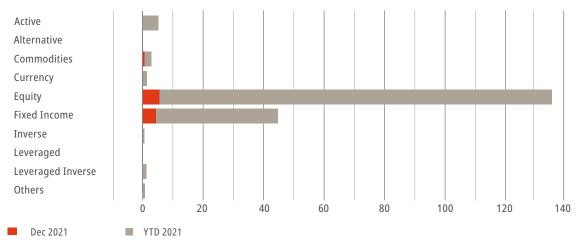
2.3 New Listings in the Quarter

First Trading Day	Product	Symbol	Currency	Managment Fee	Market Maker
05.11.2021	Raiffeisen ETF - Solid Gold Resp. Sourced & Traceable H CHF	RGRTH	CHF	0.31%	Raiffeisen Schweiz Genossenschaft
01.11.2021	SPDR MSCI Japan UCITS ETF	JPJY	JPY	0.12%	BNP Paribas
12.10.2021	Lyxor Corporate Green Bond (DR) UCITS ETF - Acc	TERA	CHF	0.20%	Flow Traders B.V Société Générale
07.10.2021	iShares \$ Corp Bond 0-3yr ESG UCITS ETF USD (Acc)	IU0A	USD	0.15%	Goldenberg Hehmeyer LLP. Société Générale
07.10.2021	iShares \$ Ultrashort Bond ESG UCITS ETF USD (Acc)	UEDA	USD	0.09%	Goldenberg Hehmeyer LLP. Société Générale
05.10.2021	iShares MSCI EMU Paris-Aligned Climate UCITS ETF EUR (Acc)	EMPC	EUR	0.15%	BNP Paribas. Société Générale
05.10.2021	$i Shares\ MSCI\ Europe\ Paris\ Aligned\ Climate\ UCITS\ ETF\ EUR(Acc)$	EUPB	EUR	0.15%	BNP Paribas. Société Générale
05.10.2021	iShares MSCI Global Semiconductors UCITS ETF USD (Acc)	SEMI	USD	0.35%	Optiver VOF. Société Générale
05.10.2021	iShares MSCI USA Momentum Factor ESG UCITS ETF USD (Acc)	IUME	USD	0.20%	Optiver VOF. Société Générale
05.10.2021	iShares MSCI USA Value Factor ESG UCITS ETF USD (Acc)	IUVE	USD	0.20%	Optiver VOF. Société Générale

The equity asset class reported assets under management of USD 1,094 trillion at the end of the year, representing a share of 68.41% (end of September: 67.28%). The second-ranked asset class, bonds, accounted for a slightly reduced share of 21.60% (end of September: 22.56%). The commodities asset class remained in third place with a share of 7.32% (end of September: 7.48%).

The number of ETFs increased by 100 units to 2,616 in the fourth quarter. Total assets under management rose by around USD 99 billion to USD 1,600 trillion. In 2021, ETFs in all asset classes generated asset inflows. In December, equity ETFs, bond ETFs, and commodity ETFs recorded the highest increases.

Net New Assets per Asset Class (in bn USD)



Source: ETFGI

Asset Classes	ETFs/ETPs	AuM Dec 2021	Market Share	Net	New Assets (in mn U	ISD)
		(in mn USD)		Dec 2021	YTD 2021	YTD 2020
Active	65	20,844	1.3%	(67)	5,401	1,601
Alternative	4	178	0.0%	(0)	168	(55)
Commodities	289	117,175	7.3%	1,403	3,053	15,684
Currency	92	9 862	0.6%	(330)	1,869	403
Equity	1,311	1,094,548	68.4%	5,639	136,194	62,592
Fixed income	454	345,618	21.6%	4,704	44,531	40,992
Inverse	65	1,746	0.1%	34	535	(278)
Leveraged	220	4,756	0.3%	435	21	(1,178)
Leveraged Inverse	100	2,235	0.1%	(124)	1,180	(227)
Other	16	3,026	0.2%	19	690	392
Total	2,616	1,599,987	100.0%	11,713	193,642	119,925

Source: ETFGI



We believe that today we can offer our clients a better execution with QOD and the service meets Vontobel's high quality requirements.

Roman Würsch heads the Trading Product Development department in Vontobel's Transaction Banking unit. He is responsible for the development, operation, and strategic orientation of the execution platform. Roman Würsch has been at Vontobel since 2018. He has a degree in computer science from ZHAW (Zurich University of Applied Sciences).



Roman Würsch, Head Trading Product Development, Vontobel.

Where do you see the biggest challenges in ETF trading?

The biggest challenge is the fact that with passive investments the holding period is on average longer and the invested capital tends to be higher compared to equities. In the case of equities, an investment can be made at short notice in anticipation of a dividend or an imminent price fluctuation, or they are traded as a hedge position from a derivative. This is usually not the case with ETFs. As a result, ETFs are simply traded less actively and there is often no natural liquidity. The market is in the hands of the major market makers and the buy side is dependent on their presence. Individual small positions can easily be traded on the regulated markets in the lit books. For large positions, this can sometimes be more challenging. On top of this low liquidity, there is also a lot of fragmentation in the European market. So for a customer with a large order, it is sometimes more difficult to get a passive execution.

What are Vontobel's needs, requirements, and objectives in relation to (automated) ETF trading?

For our customers, we are dependent on being able to access the necessary liquidity on the market. Prices for the instruments must come about fairly and trading signals on the market should be kept under the radar as far as possible. We want to offer our customers the best execution and preferably automate the execution process. With the options currently available on the market, it is also possible to trade a large position in an ETF via an automated RFQ platform at a competitive price. This is currently possible with the Quote on Demand (QOD) trading modes "Auto-Execute or Cancel" and "Auto-Execute and Optional Discretion." In this case, the transaction can be executed with just a single trade, which is of great interest for the buy side. The price is moved only minimally and only after the transaction is closed. The bigger the transactions are, the more important it is for the customer that there are no delays in delivery

or payment on the counterparty's side. We owe it to the end customer to offer flawless settlement throughout the entire process. This applies not only to the trade of the position, but also to post-trade settlement.

What does QOD offer you?

QOD offers direct access to liquidity providers without having to go via an order book with time priority. In addition, a position in QOD can be offered or searched for in the full amount. Trades in QOD are very attractive for the buy side with an all-in price, as customers are generally not interested in trading fees. This can all be done fully automatically using the "Auto-Execute or Cancel" and "Auto-Execute and Optional Discretion" functions, with a maximum wait of one second. Perhaps the best thing about it all is that the trade takes place with a central counterparty (CCP), an aspect which can be integrated in practically all core banking systems on a fully automated basis. The days in which large ETF positions in particular were not delivered by a counterparty after being purchased are therefore numbered, saving Vontobel the associated inconvenience.

How does QOD help you meet the above-mentioned needs, requirements, and objectives?

QOD may have been a little late to the market, but certainly not at the wrong time. With the upcoming CSDR and the current retail movement in trading, there are two reasons why QOD may be a good thing. It is a real gift to retail investors when their passive investments can be traded without fees – and on a regulated stock exchange, too. With the CCP on the clearing and settlement side, QOD also provides an answer to the open questions regarding CSDR. We believe that today we can offer our clients a better execution with QOD and the service meets Vontobel's high quality requirements.

Can you see any other applications for QOD in your area?

If we look at the bigger picture, then we can see a clear case with other generally illiquid asset classes, too. We think that the QOD service could absolutely make sense in the fixed-income segment, where trading is even more fragmented and the signal effect on the market needs to be kept even more sensitive.

Best Execution with Quote on Demand

Taking ETF and ETP Trading to New Levels of Efficiency

With Quote on Demand (QOD), SIX Swiss Exchange offers an on-exchange RFQ solution that increases trading efficiency and helps reduce transaction costs. Discover how Vontobel used QOD for ETFs (exchange-traded funds) and ETPs (exchange-traded products) to achieve superior results for the benefit of its clients.

Trading ETFs and ETPs – Rising Demands in a Challenging Environment

Lit order books provide price transparency, immediacy of execution and passive liquidity placement opportunities. In contrast, RFQ mechanisms offer price improvement opportunities for aggressive orders at the expense of immediacy of execution. Navigating the effective use of these two mechanisms in conjunction with each other provides performance opportunities and best execution within the ETF and ETP securities universe.

Vontobel leverages SIX QOD to supplement its liquidity sourcing capabilities. By automating the workflow which interacts with QOD, Vontobel can improve the execution outcomes for clients in an efficient and scalable way, whilst remaining in a central counterparty (CCP) cleared and interoperable post-trade environment.

Quote on Demand - The Offering

The QOD trading service supplements the existing ETF and ETP lit book – the so-called Quote Driven Market (QDM) – and offers institutional investors the option to directly issue quote requests as part of a bidding process with the most important, registered liquidity providers in Europe. Requestors may choose between different trading modes that allow for fully automated or manual execution. All trades are automatically published by SIX Swiss Exchange straight away and are shown as "Request for Quotes". As is the case for conventional

ETFs and ETPs trading at SIX Swiss Exchange, QOD allows seamless settlement via a CCP and offers trading, clearing and settlement with fully automated straight-through processing (STP). Thanks to the option to interact with the existing lit order book using the sweep order type, QOD provides access to additional liquidity.

Vontobel and Quote on Demand - A Success Story

"We want to provide our clients with best execution and, if possible, fully automate the execution. This is possible today with the QOD trading modes *Auto-Execute Or Cancel* as well as *Auto-Execute and Optional Discretion*", says Roman Würsch, Head Trading Product Development at Vontobel.

Auto-Execute Or Cancel automatically handles Vontobel's flow and executes an order within an auction time of one second or less. Auto-Execute and Optional Discretion works in a similar fashion, with the request going into discretionary mode with a maximum runtime of 5 minutes if no match is made within the first second. The possibility of automatic execution remains if the matching conditions are met in the discretionary phase – during which traders can also choose to execute manually. With QOD, orders come about in full-size with a single trade and without pre-trade transparency. Market signals are also kept under the radar during the course of the auction.

QOD's interoperable STP capability effectively lowers costs and mitigates risks associated with late settlement and fail trade situations compared to conventional RFQs which are not supported by CCPs. Vontobel, which conducted its QOD development in-house, was able to tailor the capabilities of the service according to their needs. The firm further customized the existing logic so that unfilled requests are automatically forwarded as orders in the lit book. The result is an efficient solution which further contributes to streamlining Vontobel's interfaces with SIX Swiss Exchange – from trading right through to settlement.

Delivering Positive Results

Since joining QOD, Vontobel has achieved significant price improvements over the widely used benchmark EBBO (European Best Bid and Offer). Vontobel therefore benefits not only from the automation of the entire process chain and the associated cost savings, but also from the opportunity to trade at attractive prices only available

About the ETF & ETP Segments on SIX Swiss Exchange

The Swiss Stock Exchange recently celebrated its 20th ETF anniversary: It was one of the first European exchanges to introduce an ETF segment in 2000. Since then, the trading platform has been refined, trading modalities enhanced, and its product range continually expanded. These innovations have led to the Swiss Stock Exchange becoming one of Europe's three leading ETF trading venues. This is reflected in the size of the market. As of the end of December 2021, 1,561 ETFs were available to investors on SIX Swiss Exchange, while Q4 saw a further 42 ETF listings. ETP activity has been equally buoyant on SIX Swiss Exchange. In 2021, six new ETP issuers listed on the exchange, while trading volumes stood at CHF 6.5 billion, corresponding to a 690% year-onyear increase.



Being able to trade passive investments with no fees on a regulated exchange is a game changer.

Roman Würsch, Head Trading Product Development at Vontobel

on QOD. "We believe that today we can offer our clients a better execution with QOD and the service meets Vontobel's high quality requirements", he concludes. The service has continuously gained traction over the past few months and saw additional liquidity providers connecting to it. SIX Swiss Exchange looks forward to continuing its close collaboration with Vontobel further supporting the firm as it looks to achieve their execution goals using QOD.

Next Steps

Financial institutions of all stripes are facing several cost challenges so the ability for them to achieve best execution will be critical to their wider success and overall attractiveness. By leveraging QOD, best execution will become feasible and more straightforward. In order to find out more about QOD and how it can support your business, please reach out to our experts at SIX Swiss Exchange.

About Vontobel

Vontobel is a globally active investment firm with Swiss roots, specialized in wealth management, active asset management, investment solutions and trading services. To guarantee best execution for its sophisticated client base, the firm relies on accessing the necessary liquidity at the best price possible. Vontobel continuously invests in automation and enhancements of existing and new trading services to further improve quality standards and streamline processes. Vontobel recognizes the potential of the new QOD service and has been using the service since early 2021.

Vontobel Holding AG shares are listed on the SIX Swiss Exchange and majority owned by the founding family. Their close ties to the company guarantee entrepreneurial independence and the resulting freedom creates an obligation to assume social responsibility. As of 30 September 2021, Vontobel held CHF 292.9 billion of client assets, served from 26 world-wide locations.

Further Links

QoD Explained, Newest listings, Overview ETFs, Overview ETPs, ETF Explorer

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