



MSCI World Factor Futures

Launch Date: 7th November

January 2023

Eurex is the Global Home of MSCI Derivatives



1

by Open Interest with 60.3% market share



2

by Trading volumes with 25.3% market share

2023 Traded volume

EUR 50 Billion

1.15 million contracts

CAGR 2016 – 2023: **33%**

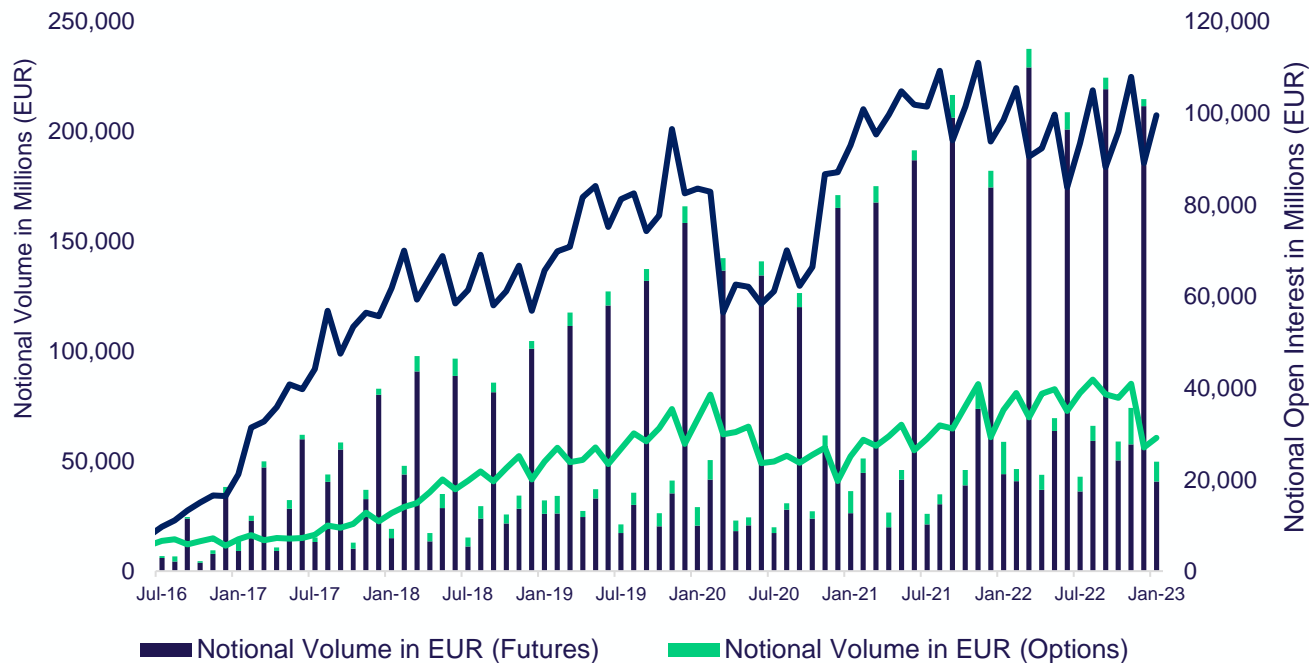
Open Interest

EUR 128 Billion

2.8 million contracts

CAGR 2016 – 2023: **33%**

Evolution of Notional Volume and Notional Open Interest



Open Interest for top MSCI Products

MSCI EM Asia (USD, NTR)	17,750,292,772	Futures
MSCI World (USD, NTR)	9,152,025,330	
MSCI World (EUR, NTR)	8,989,143,390	
MSCI USA (USD, GTR)	5,820,414,982	
MSCI India (USD, NTR)	5,698,340,958	
MSCI Europe (EUR, NTR)	5,268,798,900	
MSCI EM (USD, Price)	5,094,040,954	
MSCI Europe (USD, NTR)	4,806,051,934	
MSCI Canada (USD, GTR)	4,083,725,588	
MSCI Japan (USD, NTR)	3,956,847,346	
MSCI EM (USD, Price)*	14,729,604,449	Options
MSCI World (USD, Price)*	4,833,429,798	
MSCI EAFE (USD, Price)*	4,067,232,346	
MSCI World (USD, NTR)*	2,826,135,000	
MSCI World (EUR, NTR)*	1,639,123,973	

*Based on statistics Dec 2022 Source: FIA
 Open Interest as of Jan 31, 2023

Statistics do not include Open Interest and Traded Volumes for MSCI ESG & Dividend Products
 * Options not eligible under SEC no-action relief as of Nov 30, 2022. For eligible options, visit: [MSCI Options Snapshot.pdf \(eurex.com\)](https://www.eurex.com/MSCI-Options-Snapshot.pdf)

Factor Futures at Eurex – focus on regional exposure

Launch	Index provider	Region	# Futures	Background
Dec 15	MSCI	USA	4	Four MSCI factor futures in the US region were Eurex's first factor products
Apr 17	STOXX	Europe	6	In 2017 Eurex launched European factor futures in cooperation with Alpha Centauri
Apr 21	STOXX	Europe	6	After Axioma became part of DB, Eurex launched factor futures based on Stoxx Axioma factor indices in Europe and US.
Apr 21	STOXX	USA	6	After Axioma became part of DB, Eurex launched factor futures based on Stoxx Axioma factor indices in Europe and US.
Nov 22	MSCI	World	7	In 2022 Eurex will expand offering with global factor futures based on MSCI indices

Global Factor Futures - natural addition to offering



MSCI Factors

- MSCI Factors Indexes are designed to capture the return of factors which have historically demonstrated excess market returns over the long run
- These rules-based and transparent indices are backed by robust academic findings and empirical results



MSCI World Factor Futures at Eurex

- 7th Nov Eurex will add seven factor based futures within the MSCI World Universe: Enhanced Value, Quality, Momentum, Growth Target, Low Size, Low Volatility and High Dividend Yield



MSCI US Factor Futures at Eurex

- In 2015, Eurex listed futures on four factors within the MSCI US Universe: Value, Momentum, Quality and Low Size.



Motivation

- Many factor portfolios (and equity portfolios in general) are global and buy-side as well as sell-side have expressed a wish for global factor futures
- Eurex already has a leading position in MSCI World futures
- MSCI factors are well-established within the investment community - approximately USD 354 Billion in institutional, retail and exchange-traded fund assets are benchmarked to MSCI Factor Indexes*

*Total assets benchmarked to MSCI indexes comprised of (1) actively managed assets under management (AUM) as of December 31, 2021, reported on or before March 31, 2022, using data from eVestment for active institutional funds, Morningstar for active retail funds and internal MSCI data; (2) indexed non-ETF AUM as of December 31, 2021 using data directly collected by MSCI; and (3) indexed ETF AUM as of December 2021, ETF AUM based on data from Refinitiv and MSCI for periods on or after April 26, 2019 and from Bloomberg and MSCI for periods prior to April 26, 2019.

MSCI World Factors capture a wide range of risk premia



Factor	Index	Description	Indicator	Weighting ¹⁾	Rebalancing Frequency	Methodology	# Stocks ²⁾
Value	MSCI World Enhanced Value	Captures excess return from stocks with low price relative to their fundamental value	Forward Price to Earnings, Enterprise Value/ Operating Cash Flows ³⁾ , Price to Book Value	Value Score x Weight in Parent Index rescaled to obtain sector neutrality	Semi-annual	Simple ranking based on z-score. Fixed number of constituents. For details see Index Methodology	400
Quality	MSCI World Quality	Captures excess return from stable quality stocks	ROE, Debt-to-Equity, Earnings variability	Quality Score x Weight in Parent Index	Semi-annual	Simple ranking based on z-score. Fixed number of constituents. For details see Index Methodology	303
Momentum	MSCI World Momentum	Captures excess returns from stocks by following positive momentum	Risk adjusted 6-month and 12 month momentum ⁴⁾	Momentum Score x Weight in Parent Index	Semi-annual	Simple ranking based on z-score. Fixed number of constituents. For details see Index Methodology	346
Growth	MSCI World Growth Target	Captures excess return from the Growth Factor	Long-Term Earnings Groth (EGRLF), Earnings Per Share Growth Rate (EGRO), Sales Per Share Growth Rate (SGRO)	See Methodology	Semi-annual	Constrained optimisation to achieve a high factor exposure to the Growth Factor as defined in the Barra Equity Model: $Growth_i = 0.7 * EGRLF_i + 0.1 * EGRO_i + 0.2 * SGRO_i$ For details see Index Methodology	208
Low Size	MSCI World Equal Weighted	Captures the Size Factor by overweighting smaller companies relative to larger companies	NA	1/N	Quarterly	Equal Weights. For details see Index Methodology	1516
Dividend Yield	MSCI World High Dividend Yield	Captures excess return from stocks with high, stable dividends	Dividends (with screening criteria)	Free Float Market Cap	Semi-annual	Universe is screened for sustainability, persistence, quality, price performance. The remaining securities are included if dividend yield > 1.3 dividend yield of the parent index. For details see Index Methodology	349
Low Volatility	MSCI World Minimum Volatility	Captures excess return from the Minimum Volatility Premium	Covariance matrix	See Methodology	Semi-annual	Constrained optimisation to achieve the lowest volatility using an estimated covariance matrix. For details see Index Methodology	288

1) Most indices have issuer caps to mitigate concentration risk

2) As of 31st August 2022. For comparison MSCI Worlds included 1516 stocks

3) Does not apply to Financials

4) Both exclude the most recent month

MSCI Factor Performance








ELEMENTS OF PERFORMANCE

Factors by MSCI

MSCI Factor Performance Heat Map - World



Gross Performance as of 09/30/2022 in USD

Index Name	1D	1W	1M	3M	YTD	1Y	3Y	5Y	10Y
MSCI World Index	-0.9%	-2.4%	-9.9%	-6.1%	-25.1%	-19.2%	5.1%	5.8%	8.7%
 MSCI World Minimum Volatility Index	-0.9%	-2.3%	-7.3%	-6.3%	-17.6%	-11.8%	0.3%	4.5%	7.8%
 MSCI World High Dividend Yield Index	-0.9%	-2.7%	-8.2%	-8.8%	-16.2%	-10.2%	2.0%	3.5%	6.7%
 MSCI World Quality Index	-1.1%	-2.1%	-9.7%	-7.1%	-29.2%	-21.9%	6.9%	8.8%	10.5%
 MSCI World Momentum Index	-0.8%	-1.5%	-8.1%	-5.6%	-26.9%	-22.7%	4.8%	7.7%	10.5%
 MSCI World Enhanced Value Index	-0.7%	-3.2%	-10.2%	-10.4%	-22.0%	-18.7%	-0.1%	0.3%	6.2%
 MSCI World Equal Weighted Index	-0.2%	-1.9%	-10.2%	-7.5%	-26.0%	-23.7%	0.6%	1.8%	6.6%
 MSCI World Growth Target Index	-0.8%	-2.4%	-10.6%	-5.8%	-24.5%	-19.6%	4.5%	5.3%	9.2%

Contract Specifications

MSCI World Factor Futures

Index Name	Currency	Dividend Reinvestment	Eurex Contract Codes	Launch Date	US Allowed	Multiplier	Minimum Block Size	Non Disclosure	Tick Size	Tick Value	Tick Size Futures (TES only)	Index Level	Notional
MSCI World Enhanced Value	USD	NTR	FMGV	Nov-22	N	10	10	1000	1	10	0.001	1,248	12,480
MSCI World Growth Target	USD	NTR	FMGT	Nov-22	N	10	10	1000	1	10	0.001	4,392	43,920
MSCI World Momentum	USD	NTR	FMGM	Nov-22	N	10	10	1000	1	10	0.001	3,165	31,650
MSCI World Equal Weighted	USD	NTR	FMGE	Nov-22	N	10	10	1000	1	10	0.001	5,062	50,620
MSCI World Quality	USD	NTR	FMGQ	Nov-22	N	10	10	1000	1	10	0.001	3,388	33,880
MSCI World High Dividend Yield	USD	NTR	FMGD	Nov-22	N	10	10	1000	1	10	0.001	2,284	22,840
MSCI World Minimum Volatility	USD	NTR	FMGO	Nov-22	N	10	10	1000	1	10	0.001	4,343	43,430

ISINs and Tickers

MSCI World Factor Futures

Product Name	ISIN Future	BBG Ticker Future	BBG Ticker Index (at close)
MSCI World Enhanced Value	DE000A3DXF12	OAOA	M1WOEV
MSCI World Growth Target	DE000A3DXF20	OBAA	MXWDGTNU
MSCI World Momentum	DE000A3DXF38	OERA	M1WOMOM
MSCI World Equal Weighted	DE000A3DXF46	OESA	M1WOEW
MSCI World Quality	DE000A3DXF53	OEYA	M1WOQUE
MSCI World High Dividend Yield	DE000A3DXF61	OFWA	M1WDHDVD
MSCI World Minimum Volatility	DE000A3DXF79	OFYA	M1WOMVOL

Contacts

Dorte Carlsen
Sales EMEA

Tel: +44 207 862 7217
dorte.carlsen@eurex.com

Ralf Huesmann
Product Design

Tel: +49 69 211-1 54 43
ralf.huesmann@eurex.com

Rachna Mathur
Sales US

Tel: +1 212 309 9308
rachna.Mathur@eurex.com

Mezhgan Qabool
Sales and Business Development
Asia

Tel: +81 3 4578 6622
mezhgan.qabool@eurex.com



Disclaimer

© Eurex 2022

Deutsche Börse AG (“DBAG”), Clearstream Banking AG (“Clearstream”), Eurex Frankfurt AG (“Eurex”), Eurex Clearing AG (“Eurex Clearing”), Eurex Securities Transactions Services GmbH (“Eurex STS”) and Eurex Repo GmbH (“Eurex Repo”) are corporate entities and are registered under German law. Eurex Global Derivatives AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. Eurex Frankfurt AG is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland is in the following also referred to as the “Eurex Exchange”.

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG or its affiliates and subsidiaries or used under authorization by their respective owners, including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Repo as well as the Eurex Exchange and their respective subsidiaries, servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party’s use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is not intended for solicitation purposes but only for use as general information. All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Eurex and Eurex Clearing offer services directly to members of the Eurex Exchange respectively to clearing members of Eurex Clearing. Those who desire to trade any products available on the Eurex market or who desire to offer and sell any such products to others or who desire to possess a clearing license of Eurex Clearing in order to participate in the clearing process provided by Eurex Clearing, should consider legal and regulatory requirements of those jurisdictions relevant to them, as well as the risks associated with such products, before doing so.

Only Eurex derivatives that are CFTC-approved may be traded via direct access in the United States or by United States persons. A complete, up-to-date list of Eurex derivatives that are CFTC-approved is available at: <https://www.eurex.com/ex-en/rules-regs/eurex-derivatives-us/direct-market-access-from-the-us> .

In addition, Eurex representatives and participants may familiarize U.S. Qualified Institutional Buyers (QIBs) and broker-dealers with certain eligible Eurex equity options and equity index options pursuant to the terms of the SEC’s July 1, 2013 Class No-Action Relief. A complete, up-to-date list of Eurex options that are eligible under the SEC Class No-Action Relief is available at: <https://www.eurex.com/ex-en/rules-regs/eurex-derivatives-us/eurex-options-in-the-us-for-eligible-customers>. Lastly, U.S. QIBs and broker-dealers trading on behalf of QIBs may trade certain

single-security futures and narrow-based security index futures subject to terms and conditions of the SEC’s Exchange Act Release No. 60,194 (June 30, 2009), 74 Fed. Reg. 32,200 (July 7, 2009) and the CFTC’s Division of Clearing and Intermediary Oversight Advisory Concerning the Offer and Sale of Foreign Security Futures Products to Customers Located in the United States (June 8, 2010).

Trademarks and Service Marks

Buxl®, DAX®, DivDAX®, eb.rexx®, Eurex®, Eurex Repo®, Strategy Wizard, Euro GC®, FDAX®, FTSE 100, FWB®, GC Pooling®, GCPI®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAX-NEW® and Xetra® are registered trademarks of DBAG or its affiliates and subsidiaries. All MSCI indexes are service marks and the exclusive property of MSCI Barra. ATX®, ATX® five, CECE® and RDX® are registered trademarks of Vienna Stock Exchange AG. IPD® UK Quarterly Indexes are registered trademarks of Investment Property Databank Ltd. IPD and have been licensed for the use by Eurex for derivatives. SLI®, SMI® and SMIM® are registered trademarks of SIX Swiss Exchange AG. The STOXX® indexes, the data included therein and the trademarks used in the index names are the intellectual property of STOXX Limited and/or its licensors. Eurex derivatives based on the STOXX® indexes are in no way sponsored, endorsed, sold or promoted by STOXX and its licensors and neither STOXX nor its licensors shall have any liability with respect thereto. PCS® and Property Claim Services® are registered trademarks of ISO Services, Inc. Korea Exchange, KRX, KOSPI and KOSPI 200 are registered trademarks of Korea Exchange Inc. The names of other companies and third-party products may be trademarks or service marks of their respective owners.

FTSE® is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited (“FTSE”) under license. All rights in the FTSE®100 Index (the “Index”) vest in FTSE or its licensors. Neither FTSE nor any of their affiliates or licensors (a) assumes any liability, losses, damages, expenses or obligations in connection with any derivative product based on the Index; or (b) accepts any liability for any errors or omissions, fitness for a particular purpose or the results to be obtained from the use of the Index or related data. No party may rely on the Index or related data contained in this communication which Index and data is owned by FTSE or their affiliates. No use or distribution of the Index is permitted without FTSE’s express written consent. FTSE does not promote, sponsor or endorse the content of this communication nor any financial or derivative product that it relates to.

PRIIPs: Eurex Deutschland qualifies as manufacturer of packaged retail and insurance-based investment products (PRIIPs) under Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs Regulation), and provides key information documents (KIDs) covering PRIIPs traded on Eurex Deutschland on its website under the following link: <https://www.eurex.com/ex-en/rules-regs/priips-kids>.

In addition, according to Art. 14(1) PRIIPs Regulation the person advising on, or selling, a PRIIP shall provide the KID to retail investors free of charge.