

# MSCI derivatives at Eurex

August 2020



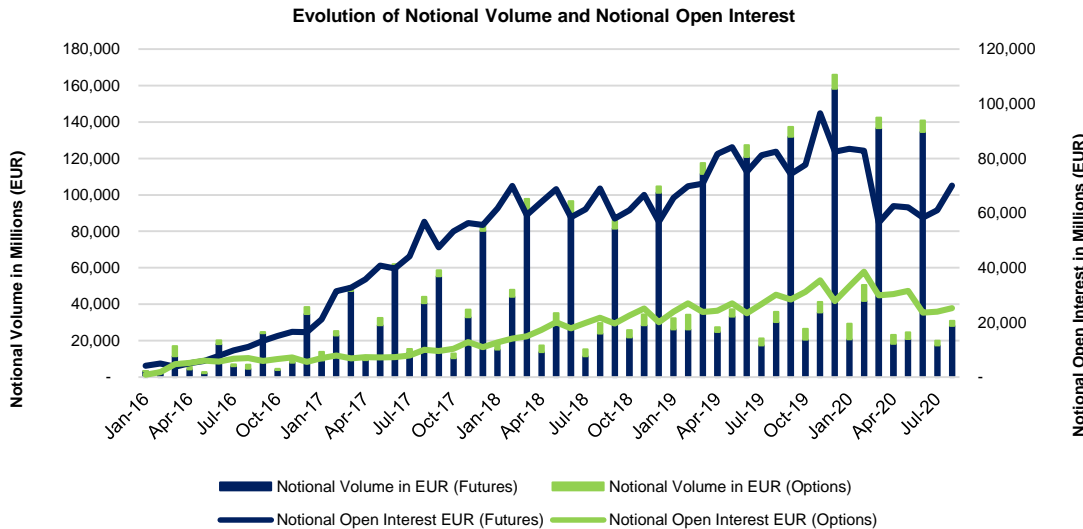
# Eurex MSCI derivatives are an increasingly popular hedging and trading tool

## Eurex MSCI Derivatives are becoming an increasingly popular product

Eurex is **#1** by Open Interest in MSCI Products (46% market share)  
**#3** by Volume in MSCI Products (15% market share)

Based on statistics from Jan 2020 – July 2020 Source: FIA

Traded volume YTD 2020: **12,531,613 contracts**  
 Open Interest in end August 2020: **2.4 million contracts ~ EUR 95 billion**



YoY Growth in MSCI Futures 2019 – 2020 : **10.98%**  
 YoY Growth in MSCI Options 2019 – 2020 : **8.14%**

### Open Interest for top MSCI Products

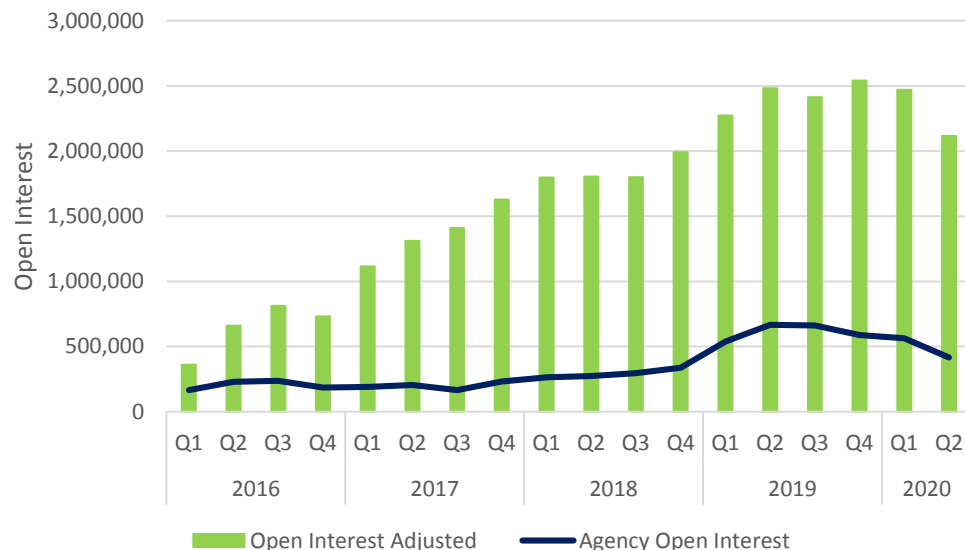


Open Interest as of August 31, 2020



# Buy-side clients flows have increased as more become aware of Eurex offering

Buy-side positions now represent almost 27% of Eurex’s MSCI derivatives flow



**By the numbers:**

- Over 40 buy-side firms are already active on Eurex MSCI products
- An additional 85 buy-side firms are waiting on side-lines for liquidity and OI to improve
- Eurex has relationships with over 500 buy-side firms globally that will be leveraged

- With UMR Rules coming into play over the next 2 years, we expect this flow to become stronger
  - Conversations have already started with buy-side clients and dealers on how to optimize this shift
- Partnerships with sell side in core regions and the expansion of Eurex buy-side outreach in Korea, China, Australia, Brazil, Mexico, Middle East – will fuel added flows
- Growth in order book volumes will bring in more hedge funds globally



# Growth Drivers for Eurex MSCI Derivatives

## ① Lower margin rates

Eurex's Portfolio based margining methodology (PRISMA) offers the highest levels of cross-margin offsets across equity derivatives and **capital efficiency**

## ② Wider breadth of offering

- MSCI Futures: Eurex offers futures over 117 regional and country indexes
- MSCI Options: Eurex offers options over 20 regional and country indexes

## ③ Improving order book liquidity picture

Market makers provide streaming quotes in all 3 time zones and on calendar spreads during roll periods

## ④ Extended trading hours covering all time zones

Asian hours have been crucial to compete and price in Emerging Markets

## ⑤ Building a MSCI Derivatives Ecosystem

- Derivatives on MSCI ESG Screened Indexes
- Futures on MSCI Dividend Point Indexes launched in Q4 2019
- Total Return Futures on MSCI USA to build on success of TRFs on SX5E

# Growth drivers: ① Lower margin rates

Eurex is one of the largest providers of Equity/Index derivatives, offering the highest levels of capital efficiency

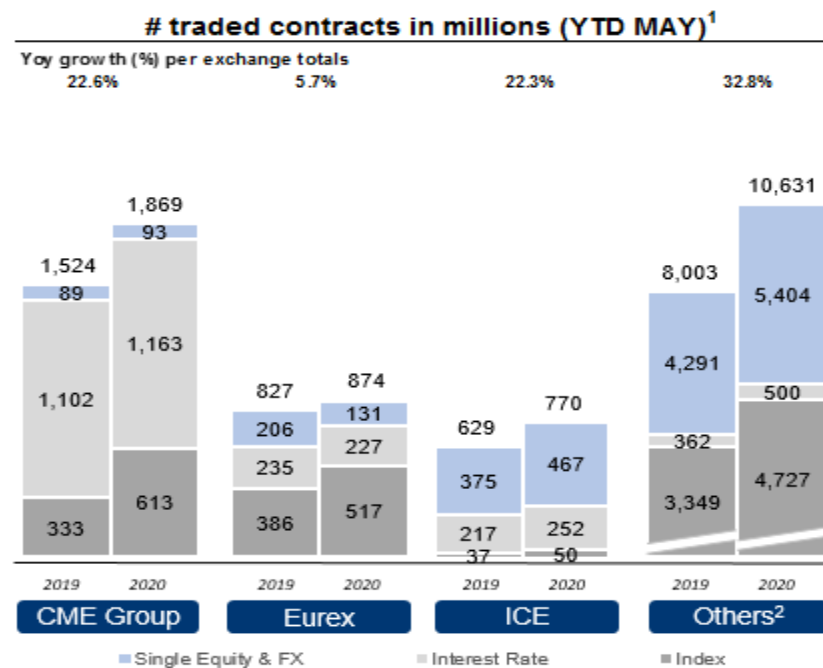
Name	Eurex	Notional (USD)	Long	Short	Initial Margin (EUR)	Total Initial Portfolio Margin Without PRISMA (EUR)	Total Initial Portfolio Margin With PRISMA (EUR)	Margin savings
MSCI World Futures	FMWN	100,000,000	712	0	2,424,595.91	22,265,481.24	11,725,978.64	51.61%
DAX® Futures	FDAX	10,000,000	337	0	14,462,091.98			
EURO STOXX 50® Index Futures	FESX	50,000,000	0	1,505	4,211,816.48			
EURO STOXX® Banks Futures	FESB	20,000,000	0	2,364	1,166,976.87			

**Margin rate per notional: 5.98%**

\*Calculation Date: 10 September 2020 \*\*Near month Expiration: 18 September 2020

1 Including Interest Rate Derivatives (LTIR & STIR), Equity Index Derivatives, Equity Derivatives and Foreign Exchange Derivatives

2 Other exchanges include: NSE, CBOE Holdings, Nasdaq OMX, BM&F Bovespa, MOEX and others which are not considered as peer group



# Growth Factors: ② Breadth of offering

Product offering includes 137 futures and options and a mix of EM and DM products

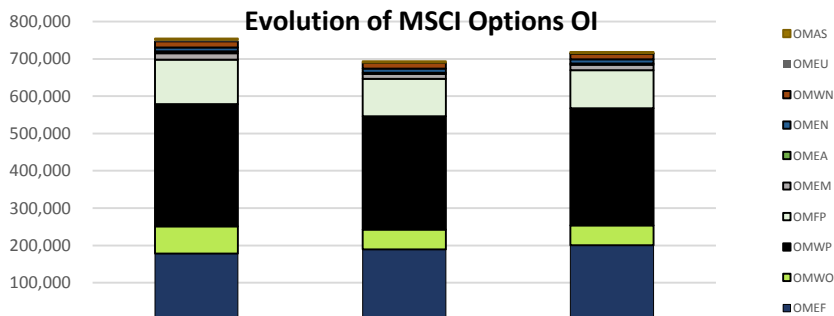
Futures on MSCI Indexes																	
CFTC Approved																	
Market	Eurex Code	Index Name	Currency	Index Type	Index Code	Future	Multiplier	Tick	Min. Block Size	% Off-Book (August)	% Agency Cleared Volume (August)	Notional Value per Contract (USD)	ADV 2020	Volume (August)	Volume in EUR (August)	Open Interest as of August 31, 2020	Open Interest in EUR as of August 31, 2020
EM	FMEA	MSCI Emerging Markets Asia	USD	NTR	NDUEEGFA Index	ZTWA	100	0.1	50	98.0%	4.3%	64,846	12,395	149,834	8,137,503,748	360,581	19,324,328,576
DM	FMWN	MSCI World	EUR	NTR	MSDEWIN Index	RSWA	100	0.05	100	86.9%	49.5%	36,618	13,265	133,534	4,095,261,825	224,820	6,993,001,100
DM	FMJP	MSCI JAPAN	USD	NTR	NDDUJN Index	FMIA	10	1	50	99.8%	3.1%	66,513	2,245	24,393	1,358,846,213	90,228	5,046,270,553
DM	FMWO	MSCI World	USD	NTR	NDDUWI Index	ZWPA	10	1	100	26.9%	31.7%	71,530	7,896	46,572	2,790,032,703	80,326	4,885,922,940
DM	FMGC	MSCI Canada	USD	GTR	GDDUCA Index	ZTBA	10	1	5	100.0%	47.8%	78,881	1,556	69,648	4,601,252,594	62,343	4,146,674,129
DM	FMED	MSCI Europe	USD	NTR	NDDUE15 Index	FJLA	10	1	50	86.3%	0.0%	68,422	1,853	6,131	351,336,184	68,758	3,885,572,069
EM	FMEM	MSCI Emerging Markets	USD	NTR	NDUEEGF Index	ZTSA	100	0.1	50	49.1%	33.6%	53,273	1,813	3,450	153,929,907	81,586	3,607,388,978
DM	FMEU	MSCI Europe	EUR	NTR	MSDEE15N Index	ZRPA	100	0.05	250	18.0%	22.3%	25,852	8,817	52,958	1,146,606,580	154,392	3,325,592,655
DM	FMFP	MSCI EAFE	USD	Price	MSDUEAFE Index	FFPA	50	0.1	10	82.2%	24.5%	95,318	352	2,903	231,749,086	28,943	2,271,325,879
DM	FMGS	MSCI USA	USD	GTR	GDDUUS Index	JHTA	10	1	1	100.0%	27.4%	147,427	199	5,065	625,391,422	16,623	2,115,366,725
EM	FMEL	MSCI Emerging Markets Latin Am.	USD	NTR	NDUEEGFL Index	ZULA	100	0.1	20	65.6%	21.0%	38,933	2,296	5,291	172,523,596	65,266	2,077,395,879
EM	FMEN	MSCI Emerging Markets	EUR	NTR	MSDEEEMN Index	RZIA	100	0.1	20	77.3%	38.4%	49,751	959	5,051	210,462,260	27,072	1,117,261,440
EM	FMCN	MSCI China Free	USD	NTR	MSCNXNUS Index	ZUYA	50	0.1	20	81.5%	6.9%	54,830	818	21,223	974,584,557	24,457	1,114,971,516
DM	FMWP	MSCI World	USD	Price	MSDUWI Index	RVPA	10	0.5	25	56.4%	0.2%	24,113	1,239	12,294	248,274,075	53,461	1,090,078,945
EM	FMEE	MSCI Emerging Markets EMEA	USD	NTR	NDDUEMEA Index	ZTYA	100	0.1	50	47.3%	22.5%	28,824	2,040	6,251	150,903,947	41,831	991,824,648
EM	FMEF	MSCI Emerging Markets	USD	Price	MSEUEGF Index	RBEA	50	0.1	20	86.2%	4.7%	54,973	626	3,792	174,588,904	21,053	963,855,406
DM	FMAU	MSCI Australia	USD	NTR	NDDUAS Index	ZTOA	10	1	10	100.0%	37.7%	39,117	620	25,759	843,900,057	24,534	809,244,271
DM & EM	FMAC	MSCI ACWI	USD	NTR	NDUEACWF Index	ZTLA	100	0.05	50	95.5%	50.0%	28,668	600	8,131	195,227,827	25,424	627,508,610
EM	FMSA	MSCI Saudi Arabia	USD	NTR	M1SAP Index	HSYA	10	0.5	25	88.1%	20.0%	11,068	1,363	6,646	61,607,294	54,410	511,745,645
DM	FMPX	MSCI Pacific ex Japan	USD	NTR	NDDUPXJ Index	ZSIA	10	1	1	51.4%	14.2%	63,549	150	370	19,692,607	8,568	452,941,508



EM Indexes  
DM Indexes

# Growth Factors: ② Breadth of offering

MSCI Options have grown by over 45% in open interest YoY



- Eurex is the main global market for MSCI options
- Offering F&O on one platform offers advantages in hedging, margining, strategy trading
- Focus is on EM, World & EAFE indices, whereby (in opposite to MSCI Futures) the main interest is on price indices
- 29 bn EUR are currently invested in 10 different options
- Market Making Quotation (on-screen) is still fairly thin

Non-CFTC Approved														
Markets	Eurex Code	Index Name	Currency	Index Type	Options Bloomberg	Multiplier	Tick	Min. Block Size	% Off-Book (August)	% Agency Cleared Volume (August)	ADV 2020	Volume in EUR (August)	Open Interest as of August 31, 2020	Open Interest in EUR as of August 31, 2020
DM	OMFP	MSCI EAFE	USD	Price	DMSCIEA1 <Index> OMON	50	0.1	100	100.0%	10.7%	421	247,294,697	102,049	7,122,761,725
DM	OMFA	MSCI EAFE	USD	NTR	NDUEAFE <Index> OMON	10	0.1	1	0.0%	0.0%	-	-	-	-
DM	OMEU	MSCI Europe	EUR	NTR	M7EU <Index> OMON	100	0.01	250	0.0%	0.0%	24	2,300,000	764	17,720,000
DM	OMEPE	MSCI Europe	EUR	Price	MXEU <Index> OMON	100	0.01	10	0.0%	0.0%	14	-	2,796	34,547,000
DM	OMEG	MSCI Europe Growth	EUR	NTR	M7EU000G <Index> OMON	100	0.01	10	0.0%	0.0%	-	-	-	-
DM	OMEV	MSCI Europe Value	EUR	NTR	M7EU000V <Index> OMON	100	0.01	10	0.0%	0.0%	-	-	-	-
DM	OMJP	MSCI Japan	USD	NTR	NDUJN <Index> OMON	10	0.1	1	0.0%	0.0%	-	-	-	-
DM	OMWO	MSCI World	USD	NTR	M1WO <Index> OMON	10	0.1	100	100.0%	46.7%	1,005	208,114,937	53,692	2,826,464,439
DM	OMWP	MSCI World	USD	Price	MXWO <Index> OMON	10	0.1	150	100.0%	5.7%	2,159	203,368,771	313,677	5,080,943,392
DM	OMWN	MSCI World	EUR	NTR	MBWO <Index> OMON	100	0.1	10	0.0%	0.0%	93	-	16,179	523,544,500
DM	OMWB	MSCI World	GBP	NTR	MDWO <Index> OMON	5	1	1	0.0%	0.0%	-	-	2,031	123,908,264
DM & EM	OMAS	MSCI AC Asia Pacific ex Japan	USD	NTR	M1APJ <Index> OMON	100	0.1	50	100.0%	50.0%	36	57,464,082	3,583	133,582,915
EM	OMCN	MSCI China Free	USD	NTR	MSCNXNUS <Index> OMON	50	0.1	1	0.0%	0.0%	-	-	-	-
EM	OMEM	MSCI Emerging Markets	USD	NTR	M1EF <Index> OMON	100	0.1	100	100.0%	0.0%	280	50,662,839	14,676	546,327,471
EM	OMEF	MSCI Emerging Markets	USD	Price	DMSCIEF1 <Index> OMON	50	0.1	100	100.0%	37.1%	2,369	1,532,438,748	200,291	7,818,775,377
EM	OMEN	MSCI Emerging Markets	EUR	NTR	MBEF <Index> OMON	100	0.1	1	0.0%	0.0%	44	-	10,690	409,711,000
EM	OMEA	MSCI Emerging Markets Asia	USD	NTR	M1MS <Index> OMON	100	0.1	50	100.0%	50.0%	43	152,550,580	3,536	150,927,973
EM	OMEA	MSCI Emerging Markets EMEA	USD	NTR	M1EE <Index> OMON	100	0.1	50	0.0%	0.0%	-	-	-	-
EM	OMEL	MSCI Emerging Markets Latin Am.	USD	NTR	M1LA <Index> OMON	100	0.1	20	0.0%	0.0%	-	-	-	-
EM	OMRU	MSCI Russia	USD	Price	MXRU10 <Index> OMON	10	0.1	10	0.0%	0.0%	-	-	-	-

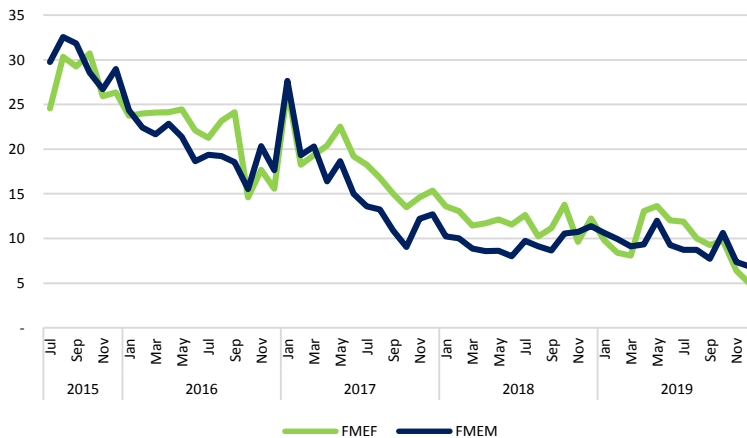
\* DM = Developed Markets / EM = Emerging Markets / FM = Frontier Markets  
 \*\* NTR = Net Total Return / GTR = Gross Total Return / Price = Price Return  
 \*\*\* Price for Order Book and Trade Entry Services (TES) is in the respective currency (EUR or USD)



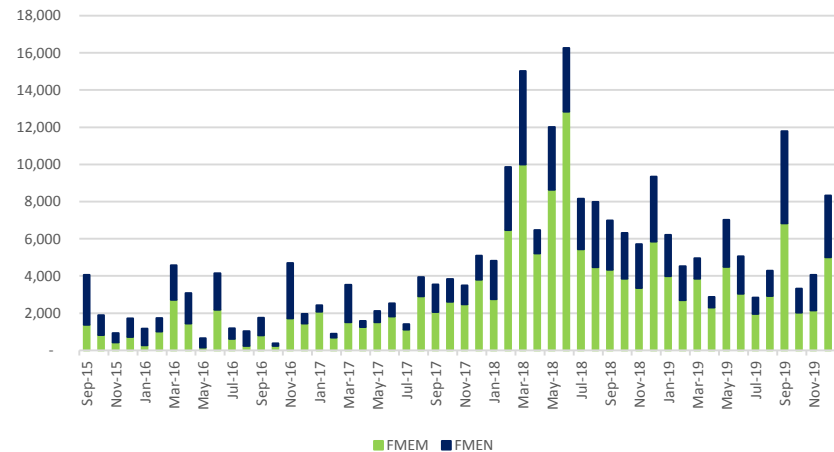
# Growth Drivers: ③ Improving order book liquidity picture

In other contracts (like MSCI EM) order book liquidity has continuously improved since 2015

ELM in FMEM and FMEF for a 1M EUR order



Order book volumes in MSCI EM (NTR, USD & EUR)

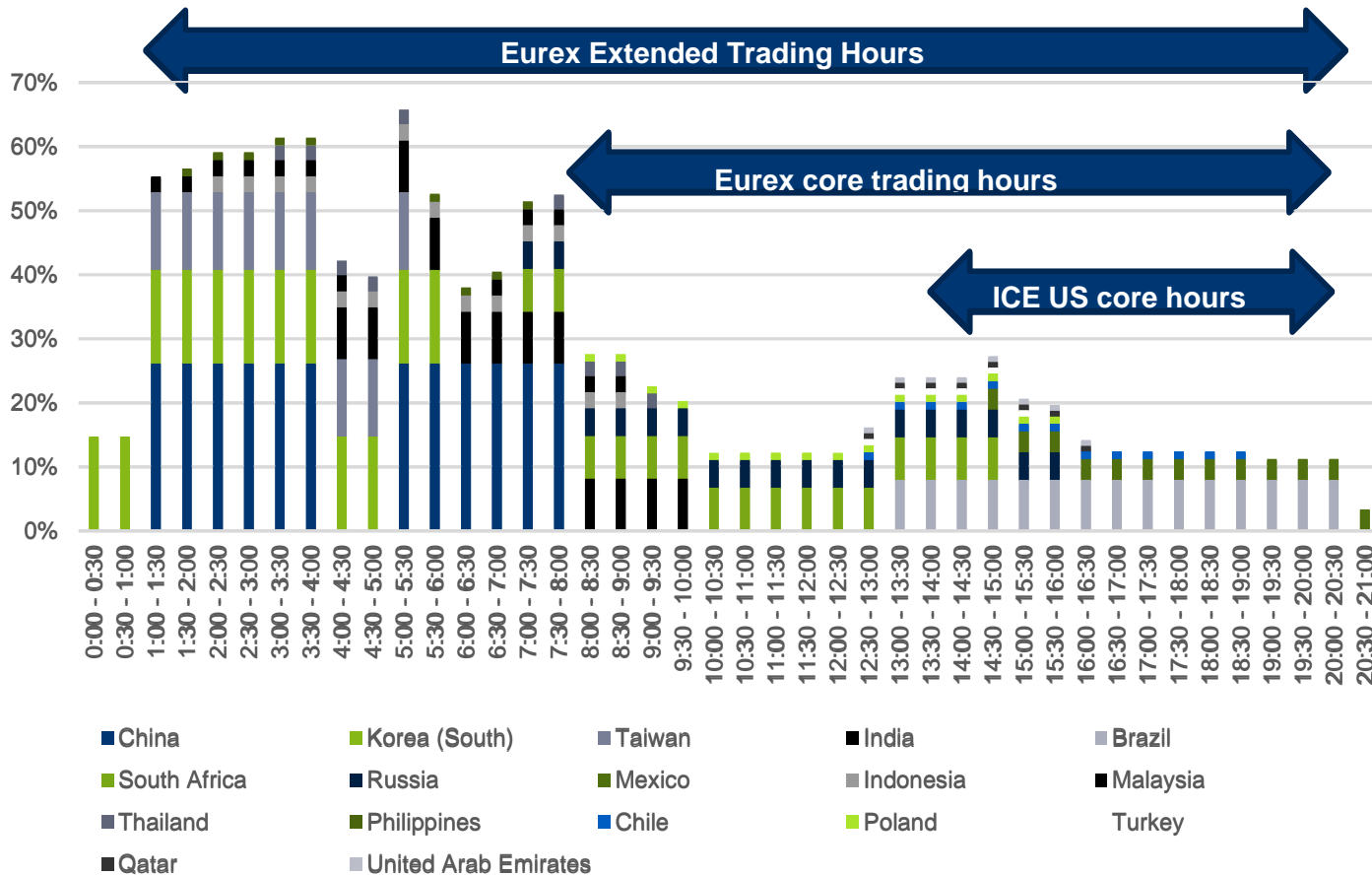


- Spreads on MSCI EM Futures, for both the NTR index (FMEM) as well as for Price index (FMEF), are tightening as well.
- Average impact for a 1M EUR order in EM has decreased from ~ 9 bps in Q1, 2018 to ~7 bps in Q1, 2019
- Orderbook volumes have increased on average 5% month-over-month for both FMEN and FMEM for the past year.
- Algo firm participation, which is usually a function of ADV, is expected to increase further.



# Growth Drivers: ④ Extended trading hours covering all time zones

Asian hours have been crucial to compete and price in Emerging Markets

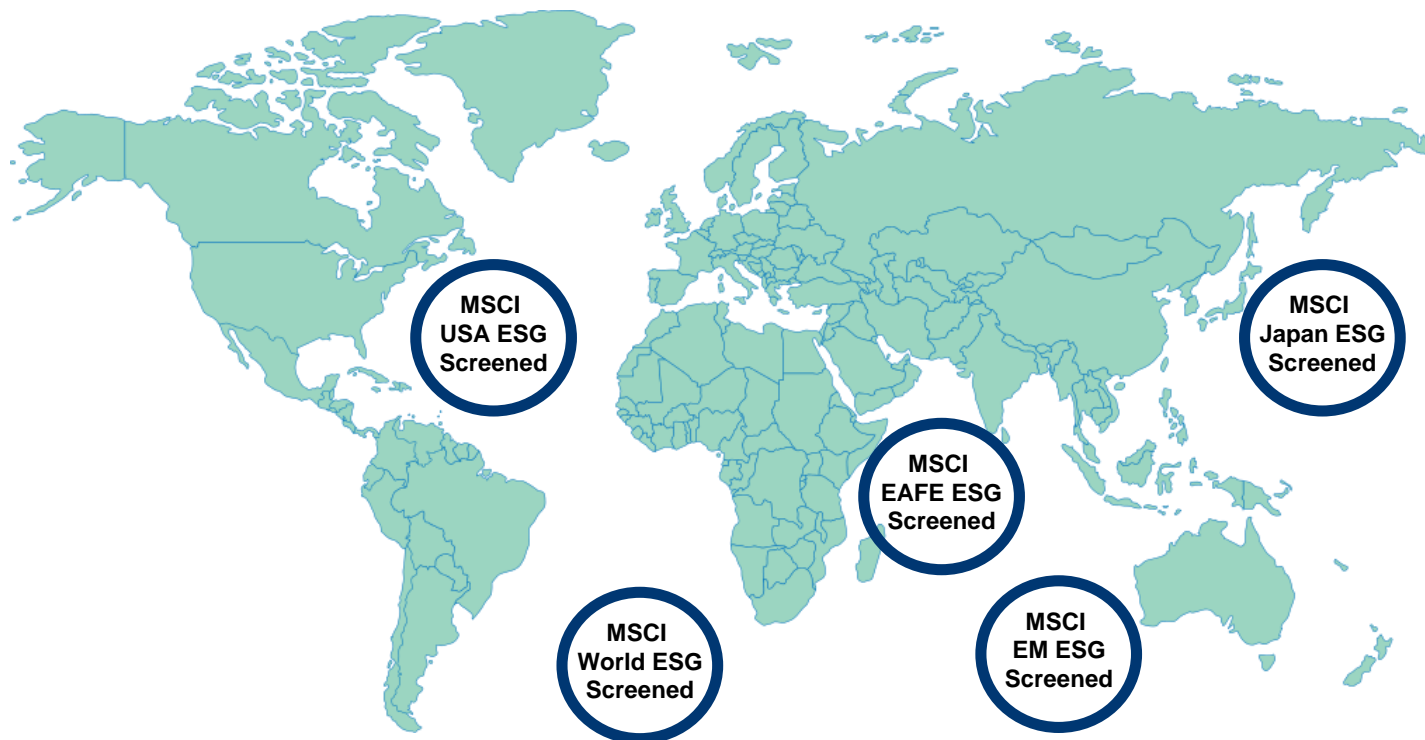


Share of MSCI EM index that is open for trading



# Growth Drivers: ⑤ Building an MSCI Ecosystem

Futures on MSCI ESG Screened Indexes were launched on March 2, 2020



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

# MSCI ESG Screened Indexes are closest to benchmark

Easy access to ESG compliance without compromising performance

## Product Value

- **Flexible** solution for asset managers with strict mandates to achieve ESG compliance
- Based on **liquid and successful** benchmark indices
- **Similar risk and return figures** compared to related benchmarks
- **Simple and fast integration** of the ESG Futures into the existing trading infrastructure
- Portfolio risk based margin (PRISMA) **enables margin offsets**
- Eurex ESG futures will **lower carbon footprint**
- **Cost Efficient** to incorporate ESG into investment strategies and manage undesired sustainability risks



## Key Values

## General Facts

- For the entire ESG offering, the index investment families are covering negative/exclusionary screening, norms-based screening, positive/best-in-class screening and sustainability themed investing
- **Stepwise extension** to complementary sustainability offerings, further regions and options
- Exclusions can help clients align their portfolios with: Social values; Financial, risk mitigation objectives; Regulations, global norms and treaties

## Why choose MSCI ESG Screened Indexes?

Aims to represent a broad universe of securities with limited exclusions

Provides investors with a transparent, consistent and more efficient option for those seeking to implement exclusions

The MSCI Screened Index leverages MSCI's **award-winning ESG Research** expertise

The MSCI Screened Index can be used as a benchmark or as a basis for financial products

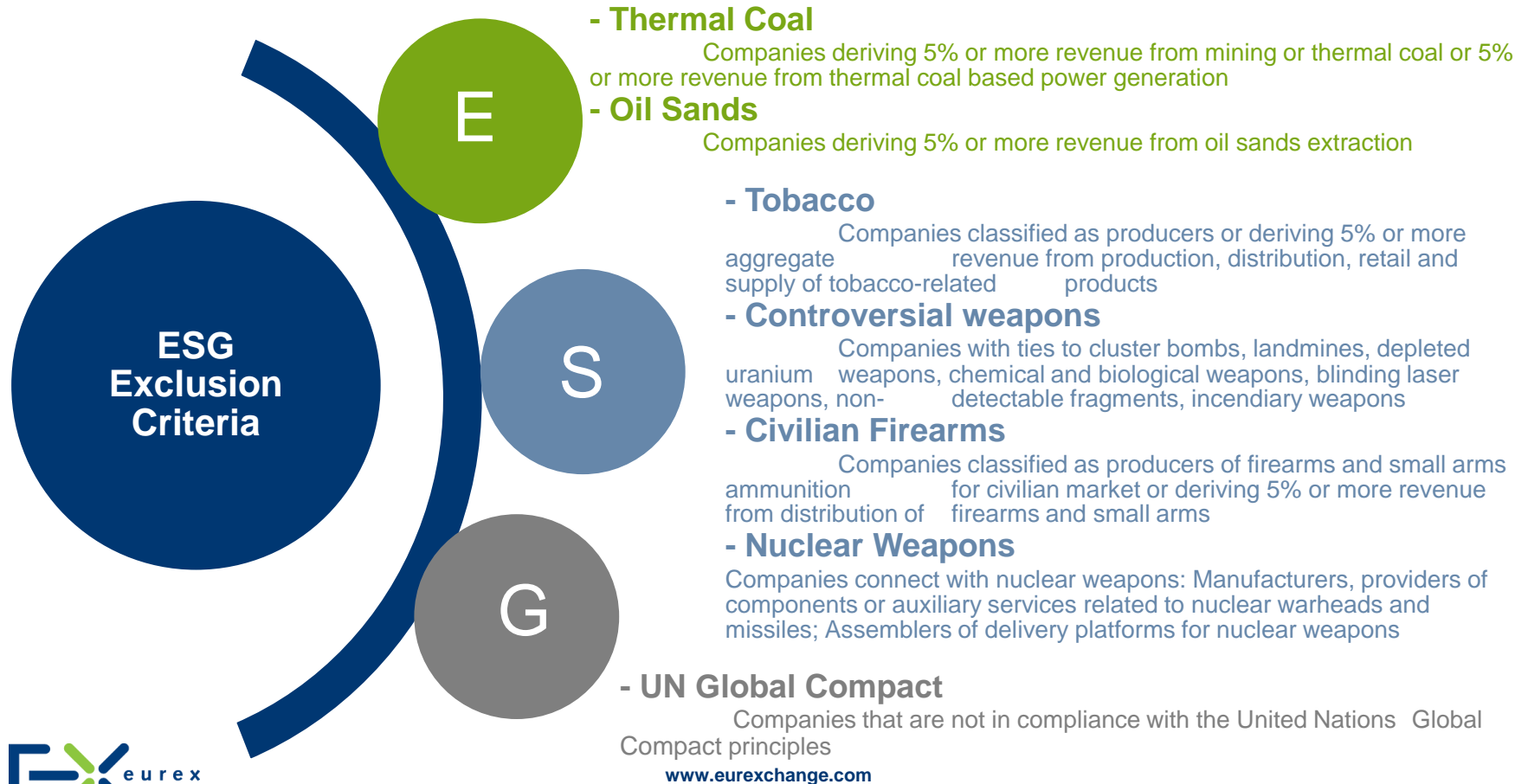
A market cap index with limited exclusions historically resulting in a minimal tracking error



# Exclusion Criteria for MSCI ESG Screened Indexes

## Selection of Exclusion

The exclusions have been selected to span the three pillars of Environmental, Social and Governance (ESG) investing which reflect investors' most common concerns



# Product Specifications

	MSCI World ESG Screened futures	MSCI EM ESG Screened futures	MSCI EAFE ESG Screened futures	MSCI USA ESG Screened futures	MSCI Japan ESG Screened futures
EUREX Product Code	FMSW	FMSM	FMSF	FMSU	FMSJ
Index Type	USD/NTR	USD/NTR	USD/NTR	USD/NTR	USD/NTR
Bloomberg Product Code	HRLA	HRRA	HRWA	HRIA	HRYA
Contract Multiplier (USD)	USD 10 per Index point				
Minimum Price Change	USD 0.5 index points				
Minimum Block Trade Size	100	50	50	100	50
Price Quotation	In points with two decimal places				
Contract months/Maturities	Up to 36 months; quarterly months				
Daily settlement price	Volume-weighted average during the last minute before 17:30 CET				
Settlement	Cash settlement, payable on the first exchange day following the Final Settlement Day				
Final settlement price	The final settlement price for MSCI ESG Screened derivatives is the index closing price on the last trading day.				
Last Trading day	3rd Friday of each expiration month if this is an exchange day; otherwise the exchange day immediately preceding that day. Close of trading in the maturing futures on the Last Trading Day is at 22:00 CET/CEST				
Final Settlement day	The final settlement day is the trading day following the last trading day.				
Trading Hours (CET)	Onbook	<b>Pre-Trading Period: 01:00-01:10 CET; Continuous Trading: 01:10-22:00 CET; Post-Trading Period: 22:00-22:10 CET</b>			
	Offbook	<b>Trading Period: 01:15-22:00 CET; Post-Trading Period: 22:00-22:10 CET</b>			
Flexible contracts	Available				
CFTC Approved	Yes				
Underlying MSCI Factsheet	<a href="#">MSCI World ESG Screened</a>	<a href="#">MSCI EM ESG Screened</a>	<a href="#">MSCI EAFE ESG Screened</a>	<a href="#">MSCI USA ESG Screened</a>	<a href="#">MSCI Japan ESG Screened</a>

Source: [https://www.eurexchange.com/resource/blob/1736802/3c240e61fa2235b577e2ea838e5d2209/data/Eurex\\_Circular\\_006\\_20\\_en\\_Attach1.pdf](https://www.eurexchange.com/resource/blob/1736802/3c240e61fa2235b577e2ea838e5d2209/data/Eurex_Circular_006_20_en_Attach1.pdf)

# Growth Drivers: ⑤ Building an MSCI Ecosystem

## Futures on MSCI Dividend Point Indexes launched in Q4 2019

### Primary users, trade rationale and benefits

	Institutions	Hedge funds	Dealers
Trade rationale	<ul style="list-style-type: none"> <li>• Beta Replacement</li> <li>• Benchmarking</li> <li>• Bond Proxy</li> </ul>	<ul style="list-style-type: none"> <li>• Tactical Positioning</li> <li>• Hedging</li> </ul>	<ul style="list-style-type: none"> <li>• Hedging</li> </ul>
Benefits	<ul style="list-style-type: none"> <li>• Wider array of tools to implement outlook</li> <li>• Trade the actual projected improvements in earnings and payout ratios of companies</li> <li>• Less volatility more correlation to corporate earnings growth</li> <li>• Minimise tracking error and at the same time provide a broad and diversified coverage of names</li> </ul>	<ul style="list-style-type: none"> <li>• Tighter spreads</li> <li>• Increased liquidity</li> <li>• Ability to implement views in a relative value manner to other asset classes/term structure</li> <li>• Ease of calculating and trading valuation discounts versus perceived fair value</li> </ul>	<ul style="list-style-type: none"> <li>• Additional tools to better hedge risks in structured product space and one delta positions</li> <li>• Single currency denomination and consistent corporate action treatment</li> </ul>

- The dividends included would be the ordinary, unadjusted, gross cash or cash equivalent dividends declared and paid on the individual equity components of the respective index in the contracts specified period. The excluded items will be those which are described or determined as special dividends, extraordinary dividends and return of capital payments etc. as determined under the MSCI Rulebook
- The treatment of Japanese and Korean dividends is described in detail in the MSCI Index calculation methodology. As per the methodology, estimated dividends are used for Japanese and Korean securities where available and adjustments are made later.

# Growth Drivers: ⑤ Building an MSCI Ecosystem

## Futures on MSCI Dividend Point Indexes launched in Q4 2019

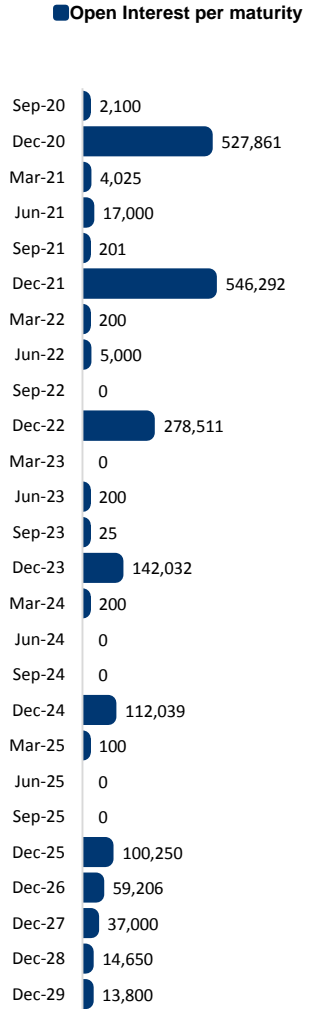
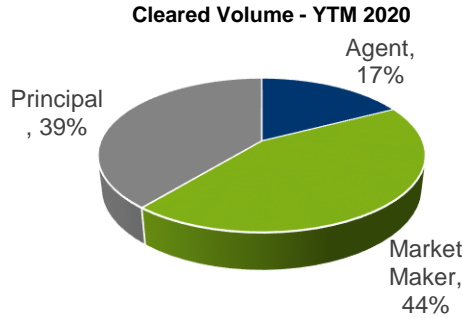
### Contract specifications

	Dividend futures	
Underlying indexes	MSCI EAFE and MSCI World (FFPD, FWPD)	MSCI Emerging Markets (FEFD)
Contract multiplier	USD 100 per index point	USD 500 per index point
Price quotation	In index points with one decimal	In index points with two decimal
Minimum price change	0.1 index points, i.e. USD 10	0.01 index points, i.e. USD 5
Contract months	5 years: The five nearest successive <u>annual</u> contracts of the December cycle	
Settlement	Cash settlement, payable on the first exchange day following the final settlement day	
Daily settlement	Determined from the volume-weighted average of the prices of all transactions during the last minute before 17:30 CET, provided that at least 5 trades have been transacted in that period	
Last trading day/close of trading	The last trading day is the 3rd Friday of December cycle if this is an exchange day at Eurex; otherwise the exchange day immediately preceding that day. Close of trading shall be 22:00 CET.	
Final settlement day	Final settlement day is the exchange day immediately following the last trading day.	
Contract period	The contract period, for purposes of dividends declared and paid, will be from, but excluding, the <u>3rd Friday of December</u> preceding the maturity month, if this is an exchange day; otherwise from and excluding the exchange day immediately preceding that day, up to and including the <u>3rd Friday of December</u> of the maturity month if this is an exchange day; otherwise up to and including the exchange day immediately preceding that day.	
Final settlement price	<ul style="list-style-type: none"> <li>• Calculation of the final settlement price is based upon the final value of the underlying MSCI index dividends as calculated by MSCI for that contract period.</li> <li>• Final settlement price is the summation of the unadjusted ordinary dividends declared and paid in the contract period on the individual constituents of the index and calculated in terms of index points.</li> <li>• The gross ordinary dividends per share are the unadjusted cash dividends declared and paid on that individual equity constituent of the index. This amount excludes special dividends, extraordinary dividends and return of capital payments etc. as determined under the MSCI rulebook.</li> </ul>	
Trading hours	<ul style="list-style-type: none"> <li>• Order book: 08:30 – 22:00 CET</li> <li>• Off-book: 08:30 – 22:00 CET</li> </ul>	

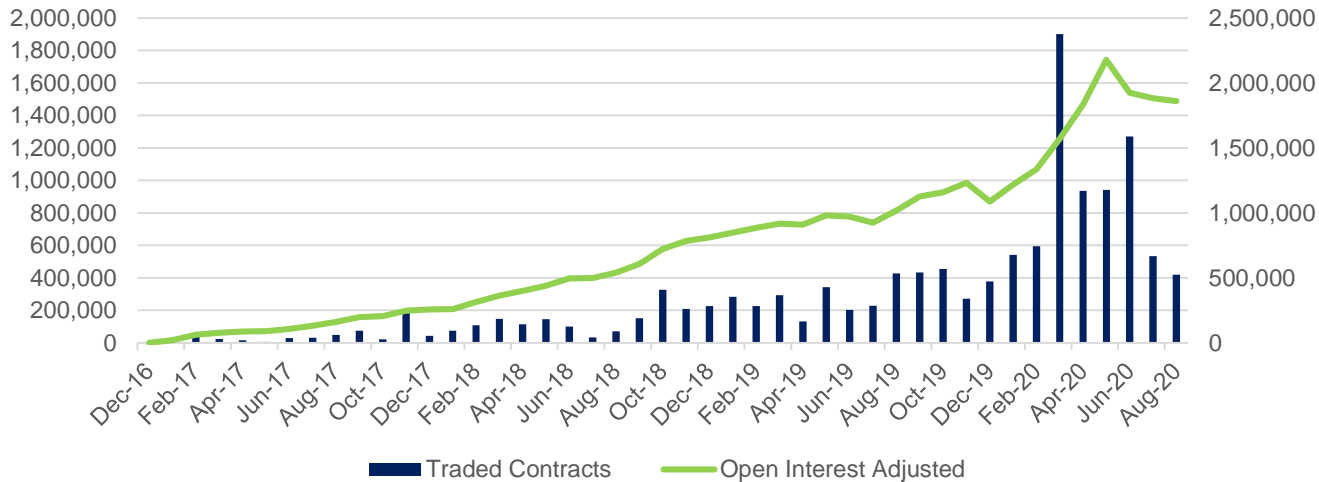
# Growth Drivers: ⑤ Building an MSCI Ecosystem

**Total Return Futures on MSCI USA to build on success of TRFs on SX5E**

Traded volume YTD 2020:	<b>7,136,545 contracts – EUR 256 Billion</b>
Open Interest (End Feb 2020):	<b>1.8 million contracts – EUR 70 Billion</b>
Growth in Volume 2020-2019:	<b>235%</b>
Growth in Volume 2018-2019:	<b>115%</b>
Growth in Open Interest June 2020 – June 2019:	<b>83%</b>



**TRF Volume and Open Interest Development**





# MSCI Derivatives Fee Structure

Product Group	MSCI Futures and Options						Derivatives on MSCI ESG Screened Index			MSCI Dividend Derivatives					
Contract	MSCI Futures			MSCI Options			Derivatives on MSCI ESG Screened Index			MSCI EM Index Dividend Futures			MSCI EAFE Index Dividend Futures		
Currency	EUR/ GBP/ USD			EUR/ GBP/ USD			USD			USD			USD		
Account	A	P	M	A	P	M	A	P	M	A	P	M	A	P	M
Order Book *	0.5	0.5	0.5	0.54	0.5	0.5	0.5	0.5	0.5	2	1.8	1.8	1.4	1.2	1.2
Eurex Enlight *	0.75	0.75	0.75	0.56	0.5	0.5	0.75	0.75	0.75	3	2.7	2.7	2.1	1.8	1.8
TES *	0.75	0.75	0.75	0.58	0.5										
Threshold (Number of Contracts)	n. a.	n. a.	n. a.	3,000	2,000	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.

\* Standard fee per contract (contract number ≤ threshold value) in respective currencies

Source: [https://www.eurexchange.com/resource/blob/46180/ccb013bc257e0a199e24cf51af891e2b/data/price\\_list\\_clearing\\_en\\_ab\\_2020\\_07\\_01.pdf](https://www.eurexchange.com/resource/blob/46180/ccb013bc257e0a199e24cf51af891e2b/data/price_list_clearing_en_ab_2020_07_01.pdf)



© 2020 by Deutsche Börse AG

All intellectual property, proprietary and other rights and interests in this publication and the subject matter of this publication are owned by Deutsche Börse AG ("DBAG"), other entities of Deutsche Börse Group or used under license from their respective owner. This includes, but is not limited to, registered designs and copyrights as well as trademark and service mark rights. Methods and devices described in this publication may be subject to patents or patent applications by entities of Deutsche Börse Group.

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 neither DBAG, nor any of DBAG's affiliates or their respective servants and agents (a) 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 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 Frankfurt AG and Eurex Clearing AG offer services directly to members of the Eurex Exchange respectively to clearing members of Eurex Clearing AG. 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 AG in order to participate in the clearing process provided by Eurex Clearing AG, 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: <http://www.eurexchange.com/exchange-en/products/eurex-derivatives-us>. In addition, Eurex representatives and participants may familiarise 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: <http://www.eurexchange.com/exchange-en/products/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®, Eurex Strategy Wizard<sup>SM</sup>, Euro GC Pooling®, FDAX®, FWB®, GC Pooling®, GCPI®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAX-NEW®, Xetra® and XTF Exchange Traded Funds® are registered trademarks of DBAG or its affiliate companies. All MSCI indexes are service marks and the exclusive property of MSCI Barra. ATX®, ATX® five, CECE® and RDX® is a registered trademark of Vienna Stock Exchange AG. IPD® UK Annual All Property Index is a registered trademark of Investment Property Databank Ltd. and has 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.

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: <http://www.eurexchange.com/exchange-en/resources/regulations/eu-regulations/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.

