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MSCI Dividend Derivatives at Eurex

October 2021

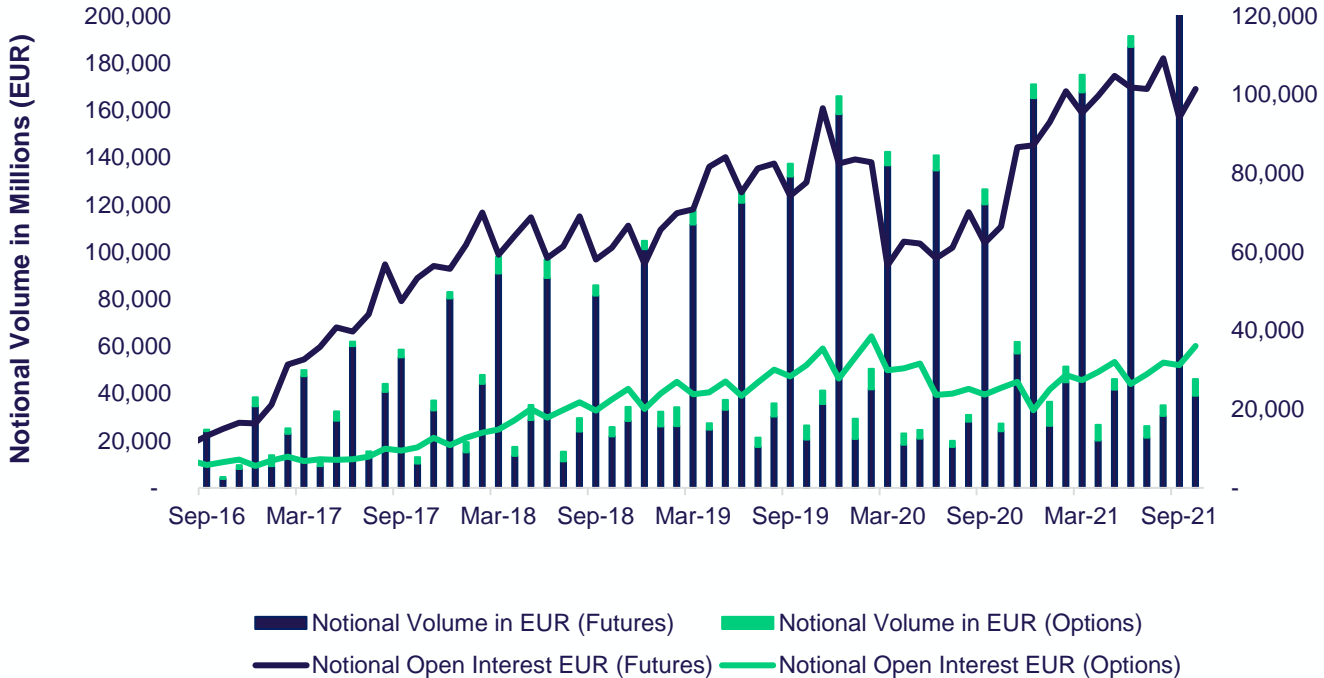
Eurex MSCI Derivatives - an increasingly popular hedging and trading tool

Eurex is

- #1** by Open Interest in MSCI Products (53.1% market share)*
- #2** by Volume in MSCI Products (24.3% market share in 2021)*

Traded volume 2021:	17,311,911 contracts
Open Interest in end Oct 2021:	2.75 million contracts ~ EUR 137.5 billion

Evolution of Notional Volume and Notional Open Interest



Open Interest for top MSCI Products



*Based on statistics Sep 2021 Source: FIA
Open Interest as of Oct 31, 2021

Benefits of Trading Dividend Derivatives

Potential uses & applications of trading listed futures and options

Dividend Derivatives

- Income Protection – allows investors to lock in expected & implied dividends to assure income returns
- Hedging of dividend risk – particularly for structured products and equity options
- Directional views on dividends – trading of house views on earnings and distributions
- Isolation of price return/capital growth on equities
- Dispersion / correlation – trading single stock vs index dividends
- Opportunistic trades
- Curve trading – terms structures / calendar spreads
- Diversification
- Relative value trading – to other asset classes e.g. credit
- Underlying for dividend linked structures

Listed Futures

- No counterparty risk & no documentation required
- More liquidity and transparency comparing to the OTC
- Standardized treatment of corporate actions adjustments
- Underlying index for each contract and maturity to monitor accrued dividend
- Possibility to monitor the history of implied dividends across market events

MSCI Index Dividend Futures

Product Overview

- The MSCI Index Dividend Futures are a traded derivative contracts that focus purely on the dividend element of a widely used and traded equity index. Other dividend index products are standard construction stock indices where the dividend yield is additionally used as a selection criteria
- The MSCI Index Dividend Future contract enables investors to take a view on the gross cumulative cash dividends (i.e. the sum of the individual cash dividends) that are announced and paid by the individual constituents of the respective index during an annual period
- Investors can therefore buy or sell the index dividend futures at the prevailing (i.e. market-implied) level of these dividend payments for the required number of periods to gain the desired exposure to, or to hedge, the dividend stream of the underlying MSCI index
- The dividends declared and paid by each individual constituents of the index during the contract period will be determined solely by MSCI and in accordance with their rulebook
- The futures contract will be cash settled, on the final settlement day (the exchange day immediately following the 3rd Friday of December), based upon the final value of this dividend summation for the annual period, MSCI thus being in effect the calculation agent of the futures contract
- Separate trading of the dividend element of the MSCI index improves risk sharing and increases users ability to focus on the fundamentals that determine equity values, as such equity values and their dividends should be collectively determinable via market tools such as the dividend discount model

Product Concept / Methodology

Aligned to the well-established product specifications on STOXX Indices

- The dividends included for the proposed MSCI Index Dividend Futures 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 futures contract will be cash settled based upon the actual ordinary gross dividends paid by the individual constituents in the contract period. These individual cash elements will then be reconstituted into index point equivalents to give a comparable trading instrument to the MSCI Equity Index
- MSCI index composition can change over time as a result of corporate actions or with the regular index review which takes place in February, May, August and November
- Changes in the index constituents could have a significant impact if added or deleted constituents have a dividend yield considerably different from that of the rest of the index
- Gross index dividend points will be calculated using price index level of the MSCI Parent Index (divisor)
- The MSCI Dividend Points Indexes methodology is aligned with the MSCI Global Investable Market Indexes methodology, where dividend reinvestment occurs on ex-date. The dividend points will contribute to the MSCI Dividend Points Index levels on the ex-dividend date
- The total dividend value is calculated as the sum of the Dividend Per Share (DPS) multiplied by index shares for all constituents of the Parent Index, which have a dividend going ex on that date

$$GrossIndexDVP_t = \sum \frac{DTRIndexNOS * GrossDividendPerShare_t / FXrate_t}{PriceIndexDevisor_t}$$

Index Calculation

Based on the same DVP approach from STOXX under consideration of MSCI Rulebook

MSCI proposes to calculate the MSCI Dividend Points Indexes as follows:

$$DVP\ Index_0 = 0 \text{ and } DVP\ Index_t = DVP\ Index_{t-1} + DVP\ Index_t$$

The MSCI Dividend Points Index is a running total of the index dividend points on the underlying MSCI Parent Index since the previous rebalancing date.

For the dividend points calculation, the exchange rate used is from the ex-date, consistent with the exchange rate used for dividend reinvestment.

Only the dividends reinvested as per the rules noted in the MSCI Index calculation methodology will be eligible for contribution to the daily dividend points for the MSCI Dividend Points Indexes.

The MSCI Dividend Points Index resets to zero periodically to allow for comparisons of dividend payouts from one period to another.

The index divisor for a day t is defined as the ratio of the initial market capitalization and the previous index level:

$$IndexDivisor_t = \frac{IndexInitialMarketCap_t}{IndexLevel_{t-1}}$$

The index divisor does not change unless the index composition changes, e.g., in cases of corporate events and index additions / deletions where a change in index market capitalization is not due to performance and does not correspond to a change in the index level.

Contract Specifications

Specification	Dividend Futures	
Underlying Indices	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 decimals
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 3 rd 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"> 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 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 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 	
Trading Hours	<ul style="list-style-type: none"> Order book: 08:30 – 22:00 CET Off-book: 08:30 – 22:00 CET 	

Fee Levels

Contract	Currency	Transaction type	Account	Standard fee per contract (contract number ≤ threshold value)	Reduced fee per contract (contract number > threshold value)	Threshold value A-accounts (contract number)
MSCI EM Index Dividend Futures	USD	Order book	A	2.00	n.a.	n.a.
			P	1.80	n.a.	n.a.
			M	1.80	n.a.	n.a.
		Off-book	A	3.00	n.a.	n.a.
			P	2.70	n.a.	n.a.
			M	2.70	n.a.	n.a.
MSCI EAFE Index Dividend Futures, MSCI World Index Dividend Futures	USD	Order book	A	1.40	n.a.	n.a.
			P	1.20	n.a.	n.a.
			M	1.20	n.a.	n.a.
		Off-book	A	2.10	n.a.	n.a.
			P	1.80	n.a.	n.a.
			M	1.80	n.a.	n.a.

Draft Liquidity Provider Scheme

Term of Incentive Scheme: 1 November 2019 – 31 December 2020

Execution type	Building Block	FEFD, FFPD, FWPD		FEFD	FFPD	FWPD				
Order book	Basis	40%	Quotation Time	09:00 – 17:30 CE(S)T						
	Package	40%		Required Coverage	80%					
	Strategy	-			Maturity Range	First three expirations need to be quoted				
	Larger Size	-				Minimum Quote Size	20 contracts on the bid and ask side	50 contracts on the bid and ask side	50 contracts on the bid and ask side	
	Tighter Spread	-					Maximum Spread	3% for expiration 1		
	Stress Presence	-						4% for expiration 2		
Total	80%	5% for expiration 3								
Eurex EnLight	Basis	-								
	Package	-								
	Strategy	-								
	Total	-								
Off-book	Basis	40%								
	Package	40%								
	Strategy	-								
	Total	80%								

Scheme	Product ID	Basis	Package	Strategy	Larger Size	Tighter Spread	Stress Presence	Eurex EnLight	Revenue Sharing
		BBB	PBB	CBB	LBB	TBB	SBB	EBB	
MSCI Div	All MSCI Index Dividend Futures	✓	✓						

Thank you!

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