# EUREX Architects of trusted markets



# FTSE® 100 Index Product Suite

March 2024

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# **Challenges in the Current Market Environment**

### **Uncleared Margin Rules**

- UMRs drive the swaps market from OTC to listed
- Buy-side clients are becoming more aware of margin optimization allowing for increased leverage and profits

### **Trading Fragmentation**

- Holding positions across multiple exchanges etc. implies illiquid markets and higher costs of trading
- Absence or insufficient use of margin offsets

### **Financing Risk During Dividend Season**

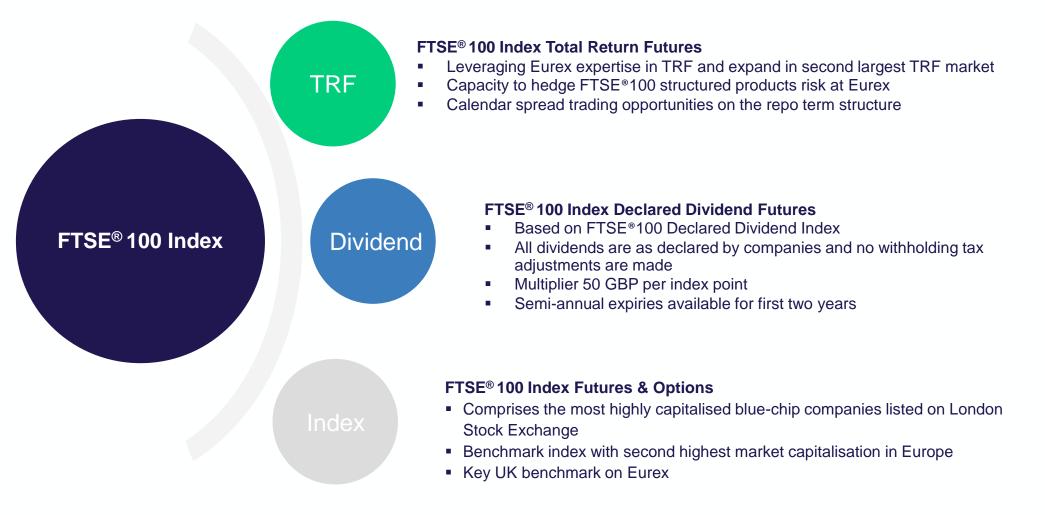
- Stressed market conditions generate uncertainty over dividend payments
- Due to uncertainty over repo levels and large financing risks, the quarterly future rolls are historically volatile

### **Market Players Need**

- Flexibility of the OTC market with operational exchange efficiency
- Ability to reduce counterparty risk and mitigate capital, collateral and balance sheet pressures
- Price transparency and anonymity of the trade
- Advantage of the largest liquidity pool for TRFs, Margin compression and increased synergies with Index Futures & TRFs on the same platform
- An alternative for the regular price index future as **Delta One Beta replacement** with short term TRFs
- An instrument with less pricing sensitivity to dividends compared to price return futures
- Attract new clients eager to invest in repo as a new asset class

# **FTSE® 100 Index Product Suite**

### Partnership with Leading Index Provider



### **Volume Since Launch**



### **Eurex FTSE® 100 Index Products Volume and Open Interest**

FTUK TTUK Total Notional OI

| Product ID | Total Traded<br>Contracts | Total Number of<br>Trades | Market Share<br>Trading Volume % |     |           | Market Share<br>Clearing Volume % |     |           | Open Interest | Open Interest  |
|------------|---------------------------|---------------------------|----------------------------------|-----|-----------|-----------------------------------|-----|-----------|---------------|----------------|
| Product ID |                           |                           | Agent                            | ММ  | Principal | Agent                             | ММ  | Principal | (Contracts)   | (Notional EUR) |
| FTUK       | 1,186,168                 | 4,793                     | 77%                              | 20% | 2%        | 4%                                | 21% | 75%       | 10,145        | 947,764,384    |
| ΟΤυκ       | 183                       | 12                        | 57%                              | 41% | 2%        | 41%                               | 41% | 18%       | 0             | 0              |
| ттик       | 1,296,787                 | 910                       | 72%                              | 25% | 3%        | 7%                                | 26% | 67%       | 181,408       | 17,620,699,961 |
| FTDD       | 0                         | 0                         | -                                | -   | -         | -                                 | -   | -         | 0             | 0              |

\*Data as of March 2024

# **FTSE® 100 Index Total Return Future Term Structure**

Relative steepness of the term structure provides trading opportunities



FTSE® 100 Index TRF (TTUK) Spread comparison

## **FTSE® 100 Index Total Return Future**

| Produc  | t Structure   |  |  |  |  |
|---|---|--|--|--|--|
| <ul> <li>Underlying Indices <ul> <li>FTSE® 100 Index (UKX)</li> <li>FTSE® 100 Cumulative Dividend Points Index</li> <li>Sterling Overnight Index Average (SONIA)</li> </ul> </li> <li>TRF Spread <ul> <li>Executed in basis points via the T7 trading system is converted in index points in order to determine the futures price in index points.</li> </ul> </li> <li>Trade Types on Eurex T7 Trading System <ul> <li>Trade at Index Close (TAIC) with an equity strike level based on index close (e.g., UKX Close).</li> <li>Trade at Market (TAM) based on custom-defined equity strike level provided by the investor.</li> </ul> </li> <li>Contract Position <ul> <li>TRF contracts will represent the theoretical exposure to the underlying</li> </ul> </li> </ul> | Counterparty<br>A (Buyer =<br>Long TRF)       The Buyer Pays (SONIA + TRF<br>The Buyer Pays (SONIA + TRF       Counterparty<br>B (Seller =<br>Short TRF)         Spread %)         Cost of Funding         • Made up in part by the overnight funding rate (SONIA) and the traded TRF<br>Spread.         Parameters         • Quoted and traded in spread terms to insulate the financing component in a<br>transparent manner for the dealers / clients who want to play the repo rate.         • Total returns will be incorporated into the Daily Settlement price and the<br>daily profit and loss will be paid as a daily cash-flow via the regular variation<br>margin process.         • (Equity Performance + Distributions) = (Funding + TRF Spread)<br>"Quoted" TRF Spread = Equity Performance + Distributions - Funding |  |  |  |  |
| <ul> <li>index at trade date assuming holding to expiry.</li> <li>The holder of a long position will receive the distributions associated with holding the cash basket, against which they will pay the funding associated with this purchase.</li> </ul>   |   |  |  |  |  |

# **Contract Specifications - TTUK**

|                                     | FTSE <sup>®</sup> 100 Index Total Return Futures (TTUK)  | Bloomberg: IUEA Index<br>Reuters: 0#TTUK:                     |  |  |  |  |
|-------------------------------------|--|---|--|--|--|--|
| Underlying Indices                  | FTSE <sup>®</sup> 100 Index (UKX)<br>FTSE <sup>®</sup> 100 Cumulative Dividend Points Index<br>Sterling Overnight Index Average (SONIA)  |   |  |  |  |  |
| Contract Multiplier                 | GBP 10 per index point   |   |  |  |  |  |
| US Tradability                      | CFTC Certified; FTSE <sup>®</sup> 100 Index Total Return Futures (TTUK) can be offered or sold to persons in<br><u>Direct market access from the U.S. (eurex.com)</u>  | n the U.S. via Eurex terminals with direct access in the U.S: |  |  |  |  |
| Quotation (TRF Spread)              | TRF Spread as annualized rate expressed in basis points with one decimal (+ / - / 0)   |   |  |  |  |  |
| Minimum TRF Spread<br>Change        | +/- 0.5 basis points   |   |  |  |  |  |
| TRF Spread Conversion               | The TRF Spread will be converted within the T7 system into TRF futures prices expressed in inde  | x points  |  |  |  |  |
| Trade Types: TAC & TAM              | Trade at Close ("TAC") - strike price based on Index Close<br>Trade at Market ("TAM") with a custom-defined strike price   |   |  |  |  |  |
| Accrued Distributions &<br>Funding  | The distribution and funding rate payments will be accumulated (i.e., "Accruals Approach") since the launch of the TRF offering and added to the TRF futures price in index points. The daily changes in the distributions and funding payments are paid out daily via the variation margin ("Daily Cash Flows" approach). |   |  |  |  |  |
| Contract Months                     | <ul> <li>10 years:</li> <li>12 quarterly months of the March, June, September and December cycle</li> <li>Subsequent 7 annual December expiries</li> </ul>   |   |  |  |  |  |
| Settlement                          | Cash settlement, payable on the first exchange day following the Final Settlement Day  |   |  |  |  |  |
| Last Trading Day                    | The Eurex trading day immediately preceding the Expiration day   |   |  |  |  |  |
| Expiration Day                      | 3rd Friday of each expiration month if this is an exchange day; otherwise, the immediately precedir  | ng exchange day   |  |  |  |  |
| Final Settlement Price (FSP)        | Established by Eurex on Expiration Day and it is based the following components:<br>Final Settlement Price of Regular Price Index Future, accrued distributions and accrued funding un   | til the expiry date, in Index Points                          |  |  |  |  |
| FSP Reference Price Index<br>Future | Final Settlement Price of the $\ensuremath{FTSE}^{\ensuremath{\mathbb{B}}}$ 100 Index Futures (FTUK) on Expiration Day   |   |  |  |  |  |
| Trading Hours                       | Order book (TAC): 10:15 – 17:25 CET<br>Trade Entry Services (TAIC & TAM): 10:15 – 22:00 CET<br>Last trading day trading until: 17:30 CET   |   |  |  |  |  |

## **FTSE® 100 Index Dividend Future**

### **Product Summary**

#### **Dividend Focus & Details**

- The FTSE<sup>®</sup> 100 Index Dividend Futures are a traded derivative contracts that focus purely on the dividend element of a widely used and traded equity index.
- 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.

#### **Dividend Stream Exposure**

- The FTSE<sup>®</sup> 100 Dividend Future contract enables investors to take a view on the gross cumulative cash dividends during an annual period.
- This allows investors to buy or sell the index dividend futures at the prevailing level of these dividend payments for the required number of periods.

### Separate Trading of the Dividend Element of the FTSE Index

 Improves risk sharing and increases users' ability to focus on the fundamentals that determine equity values.

### **Product Structure**

#### **Metrics**

 Gross index dividend points will be calculated using price index level of the FTSE Parent Index (divisor).

#### Methodology

 The FTSE Dividend Points Indexes methodology is aligned with the FTSE Global Investable Market Indexes methodology, where dividend reinvestment occurs on ex-date. The dividend points will contribute to the FTSE Dividend Points Index levels on the ex-dividend date.

### Calculation

 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.

### Formula

 $GrossIndexDVP_{t} = \sum \frac{DTRIndexNOS*GrossDividendPerShare_{t}/FXrate_{t}}{PriceIndexDevisor_{t}}$ 

# **Contract Specifications - FTDD**

|   | FTSE <sup>®</sup> 100 Index Declared Dividend Futures (FTDD)  | Bloomberg: IUBA Index<br>Reuters: 0#FTDD:                      |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| Underlying Index                                | FTSE <sup>®</sup> 100 Index Declared Dividend Index (F1DIVD)  |  |  |  |  |  |  |
| Contract Multiplier                             | GBP 50 per index point  |  |  |  |  |  |  |
| US Tradability                                  | CFTC Certified; FTSE <sup>®</sup> 100 Index Declared Dividend Futures (FTDD) can be offered or sold to personal U.S: <u>Direct market access from the U.S. (eurex.com)</u>  | sons in the U.S. via Eurex terminals with direct access in the |  |  |  |  |  |
| Minimum Price Change                            | 0.1 Index Points  |  |  |  |  |  |  |
| Contract Months                                 | <ul> <li>10 years:</li> <li>Ten annual expirations (December)</li> <li>Four semi-annual expirations (June, December)</li> <li>Three quarterly expirations (March, June, September, December)</li> </ul>                         |  |  |  |  |  |  |
| Settlement                                      | Cash settlement, payable on the first exchange day following the Final Settlement Day   |  |  |  |  |  |  |
| Last Trading Day                                | Last Trading Day is the Final Settlement Day<br>Close of trading in the maturing futures on the last trading day is at 12:00 CET  |  |  |  |  |  |  |
| Final Settlement Day &<br>Expiration            | 3rd Friday of each expiration month if this is an exchange day; otherwise, the immediately precedin   | ng exchange day  |  |  |  |  |  |
| Final Settlement Price (FSP)<br>in Index Points | Established by Eurex on Expiration Day and based on the final value of the underlying index divide<br>Dividend Points are calculated from (but excluding) the 3rd Friday in December of the previous calculated                 |  |  |  |  |  |  |
| FSP Reference Price Index<br>Future             | FTSE <sup>®</sup> 100 Declared Dividends Index (F1DIVD) value as calculated by FTSE International Ltd, republic dividends by the individual constituents of the FTSE <sup>®</sup> 100 Index expressed in terms of index points, |  |  |  |  |  |  |
| Trading Hours                                   | Order book: 08:30 – 22:00 CET<br>Trade Entry Services: 08:30 – 22:00 CET<br>Last trading day trading until 12:00 CET  |  |  |  |  |  |  |

# **FTSE® 100 Index Future & Option**

| Product Summary   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Key Drivers and Objectives  | Key Contract Specifications - Futures  |  |  |  |  |  |
| <ul> <li>Expansion of Index Futures &amp; Options product suite to include UK's key benchmark index</li> <li>Simple and fast integration into existing trading infrastructure</li> <li>Portfolio risk-based margin (PRISMA) enables margin offsets</li> </ul>   | <ul> <li>Trading hours 07:50-22:00 CET; last trading day until 11:15 CET</li> <li>Contract value: GBP 10 per index point</li> <li>Tick size: 0.5 Index points (GBP 5)</li> <li>Available maturities: Nearest four quarterly maturities</li> <li>Minimum Block Trading Size (TES/Enlight): 500</li> </ul>   |  |  |  |  |  |
| Underlying Index  | Key Contract Specifications - Options  |  |  |  |  |  |
| <ul> <li>FTSE Russell's FTSE<sup>®</sup> 100 Index</li> <li>At maturity, the contracts final settlement price based on expiry value of the FTSE<sup>®</sup> 100 Index calculated by FTSE following the Exchange Delivery Settlement Price ("EDSP") based on intraday auction on the London Stock Exchange</li> <li>FTSE<sup>®</sup> 100 Expiry Index ("UKXSP")</li> </ul> | <ul> <li>Trading hours 08:50-17:30 CET; last trading day until 11:15 CET</li> <li>Contract value: GBP 10 per index point</li> <li>Tick size: 0.5 Index points (GBP 5)</li> <li>Available maturities: Nearest six monthly, following six quarterly expirations, next two half yearly an up to 7 yearly (like EURO STOXX 50® Options)</li> <li>Strike intervals: ≤ 6 mths: 25; 6-36 mths:50; &gt;36 mths:100</li> <li>Minimum Block Trading Size (TES/Enlight): 500</li> </ul> |  |  |  |  |  |

# **Contract Specifications - FTUK**

|                                   | FTSE <sup>®</sup> 100 Index Futures (FTUK)   | Bloomberg: IUAA Index<br>Reuters: 0#FTUK:                      |
|-----------------------------------|--|--|
| Underlying Index                  | FTSE <sup>®</sup> 100 Index (UKX)  |  |
| Contract Multiplier               |  |  |
| US Tradability                    | CFTC Certified; FTSE <sup>®</sup> 100 Index Futures (FTUK) can be offered or sold to persons in the U.S. via access from the U.S. (eurex.com)  | a Eurex terminals with direct access in the U.S: Direct market |
| Minimum Price Change              | 0.5 Index Points   |  |
| Contract Months                   | The four nearest quarterly months of the March, June, September and December cycle.  |  |
| Settlement                        | Cash settlement, payable on the first exchange day following the Final Settlement Day  |  |
| Last Trading Day                  | Last Trading Day is the Final Settlement Day<br>Close of trading in the maturing futures on the last trading day is at 11:15 CET   |  |
| Final Settlement Day & Expiration | Final Settlement & Expiration Day is the 3rd Friday of each expiration month if this is a trading day exchange day.  | at Eurex Deutschland, otherwise the immediately preceding      |
| Final Settlement Price (FSP)      | Established by Eurex on Expiration Day and index value is based on the FTSE 100 Expiry Index ("<br>the Exchange Delivery Settlement Price ("EDSP") intraday auction on the London Stock Exchange |  |
| Trading Hours                     | Order book: 07:50 – 22:00 CET<br>Trade Entry Services: 08:00 – 22:00 CET<br>Last trading day trading until 11:15 CET   |  |
| Minimum Block Trading Size        | 500  |  |

# **Contract Specifications - OTUK**

|                                      | FTSE <sup>®</sup> 100 Index Options (OTUK)  | Bloomberg: UKXEUX<br>Reuters: 0#OTUK:                         |  |  |  |  |  |
|--------------------------------------|---|---|--|--|--|--|--|
| Underlying Index                     | FTSE <sup>®</sup> 100 Index (UKX)   |   |  |  |  |  |  |
| Contract Multiplier                  | GBP 10 per index point  |   |  |  |  |  |  |
| US Tradability                       | S Tradability CFTC Certified; FTSE <sup>®</sup> 100 Index Options (OTUK) can be offered or sold to persons in the U.S. via Eurex terminals with direct access in the U.S. <u>Direct maccess from the U.S.</u> (eurex.com)   |   |  |  |  |  |  |
| Minimum Price Change                 | 0.5 Index Points  |   |  |  |  |  |  |
| Contract Months                      | 9 years and 11 months: up to and including the next, the 2nd and the 3rd, the 4th, the 5th and the 6 6 succeeding quarterly expiration days (March, June, September, December) as well as up to the 1 and up to the next 7 succeeding yearly expiration days (December) |   |  |  |  |  |  |
| Strikes Interval                     | ≤ 6 months: 25 ; 6-36 months: 50 ; >36 months: 100  |   |  |  |  |  |  |
| Exercise                             | European-style; an option can only be exercised on the final settlement day of the respective optio CET).   | n series until the end of the Post-Trading Full Period (19:30 |  |  |  |  |  |
| Settlement                           | Cash settlement, payable on the first exchange day following the Final Settlement Day   |   |  |  |  |  |  |
| Last Trading Day                     | Last Trading Day is the Final Settlement Day<br>Close of trading in the maturing options on the last trading day is at 11:15 CET  |   |  |  |  |  |  |
| Final Settlement Day &<br>Expiration | Final Settlement & Expiration Day is the 3rd Friday of each expiration month if this is an exchange   | day; otherwise, the immediately preceding exchange day        |  |  |  |  |  |
| Final Settlement Price (FSP)         | Established by Eurex on Expiration Day and index value is based on the FTSE 100 Expiry Index ("<br>the Exchange Delivery Settlement Price ("EDSP") intraday auction on the London Stock Exchange  |   |  |  |  |  |  |
| Trading Hours                        | Order book: 08:50 – 17:30 CET<br>Trade Entry Services: 09:00 – 19:00 CET<br>Last Trading Day trading until 11:15 CET  |   |  |  |  |  |  |
| Minimum Block Trading Size           | 500   |   |  |  |  |  |  |

### **Margin Offsets**

Eurex can offer significant margin offsets between TRFs and equity derivatives in PRISMA. The majority of delta for TRS are done using listed equity index products such as index futures, synthetics forward (using listed options) and dividend futures.

| Portfolio            | Expiry | Product Long              | Product Short | # Long | # Short | Initial Margin | IM in % of<br>Notional | Portfolio<br>Effects |
|----------------------|--------|---------------------------|---------------|--------|---------|----------------|------------------------|----------------------|
| FTUK 1st             | 202106 | FTUK 1st                  |               | 1      |         | 6846,84        | 9%                     |                      |
| OTUK 7th             | 202112 | OTUK 7th                  |               | 1      |         | 4,434.12       | 6%                     |                      |
| TTUK 1st             | 202106 | TTUK 1st                  |               | 1      |         | 7,671.29       | 10%                    |                      |
| FTDD 1st             | 202106 | FTDD 1st                  |               | 1      |         | 837.05         | 6%                     |                      |
| TTUK 19th            | 203012 | TTUK 19th                 |               | 1      |         | 8,704.33       | 11%                    |                      |
| FTUK 1st - TTUK 1st  | 202106 | FTUK 1st                  | TTUK 1st      | 1      | 1       | 2,662.16       |                        | 73.36%               |
| TTUK 1st - TTUK 5th  | 202206 | TTUK 1st                  | TTUK 5th      | 1      | 1       | 2,794.49       |                        | 61.04%               |
| TTUK 1st - TTUK 19th | 203012 | TTUK 1st                  | TTUK 19th     | 1      | 1       | 3,185.10       |                        | 60.59%               |
| TTUK 5th - TTUK 19th | 203012 | TTUK 5th                  | TTUK 19th     | 1      | 1       | 3,212.71       |                        | 58.46%               |
| FTUK 1st, syn. FTUK  | 202106 | FTUK 1st,<br>OTUK ATM Put | OTUK ATM Call | 1+1    | 1       | 208.76         |                        | 76.80%               |

Note: The data is only indicative, calculated on April 27, 2021. Please do not use it for productive purposes.

# Pricing

Pricing is configured on standard Eurex elements

- Transaction (Trade) Fee
- Cash Settlement Fee

Assumption is that initial trade migration will be similar to on-boarding of TRS i.e. large bilaterally negotiated trades introduced using TES – hence Block Trade Fees are equivalent to Orderbook.

| Fee Type    | Execution Type | Account | FTSE <sup>®</sup> 100<br>Index Futures<br>(FTUK) | FTSE <sup>®</sup> 100<br>Index Options<br>(OTUK) | Reduced Fee | Threshold | FTSE <sup>®</sup> 100<br>Index Total<br>Return Futures<br>(TTUK) | FTSE <sup>®</sup> 100<br>Index Declared<br>Dividend<br>Futures (FTDD) |
|-------------|----------------|---------|--|--|-------------|-----------|--|---|
|             |                | А       | GBP 0.35   | GBP 0.33   | GBP 0.17    | 3,000     | GBP 1.00   | GBP 1.20  |
|             | Order Book     | Ρ       | GBP 0.30   | GBP 0.30   | GBP 0.15    | 2,000     | GBP 1.00   | GBP 1.20  |
|             |                | Μ       | GBP 0.30   | GBP 0.30   | n/a         | n/a       | GBP 1.00   | GBP 1.20  |
|             | EnLight        | А       | GBP 0.40   | GBP 0.34   | GBP 0.17    | 3,000     | n/a  | GBP 1.80  |
| Matching    |                | Ρ       | GBP 0.35   | GBP 0.30   | GBP 0.15    | 2,000     | n/a  | GBP 1.80  |
|             |                | Μ       | GBP 0.35   | GBP 0.30   | n/a         | n/a       | n/a  | GBP 1.80  |
|             | TES            | А       | GBP 0.40   | GBP 0.35   | GBP 0.18    | 3,000     | GBP 1.00   | GBP 1.80  |
|             |                | Ρ       | GBP 0.35   | GBP 0.30   | GBP 0.15    | 2,000     | GBP 1.00   | GBP 1.80  |
|             |                | Μ       | GBP 0.35   | GBP 0.30   | n/a         | n/a       | GBP 1.00   | GBP 1.80  |
| Maintenance |                | A/P     |  |  |             |           | GBP 0.004 daily  |   |
| Fees        |                | Μ       |  |  |             |           | GBP 0.002 daily  |   |

Note: Liquidity Provider Schemes parameters and benefits to be confirmed after final market consultation

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Total Return Futures (TESX):

https://www.eurex.com/ex-en/markets/idx/trf

FTSE 100 Total Return Futures:

https://www.eurex.com/ex-en/markets/idx/ftse-trf

### Eurex Trade Entry Services / Multilateral Trade Registration (MTR):

https://www.eurex.com/ex-en/trade/eurex-t7-entry-services

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