

TAIFEX FTSE[®] 100 Index Futures



Taiwan Futures Exchange
November 2020

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Purpose

- The UK stock market is one of the primary financial markets in the world, and the FTSE[®] 100 Index best represents the UK market performance and economic condition. The launch of FTSE[®] 100 Index Futures will enable traders to directly participate in the UK stock market without exposure to FX risks.
 - Following its US and Japan index futures, TAIFEX is set to launch the FTSE[®] 100 Index Futures, which further expands TAIFEX's overseas index product suit, covering North America, Asia and Europe.
- ➔ **FTSE[®] 100 Index Futures to be launched on November 23rd**



Introduction

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FTSE[®] 100 Index

- **Launch date:** January 3, 1984
- **Base date:** December 30, 1983
- **Base value:** 1,000
- **Constituents:** the 100 most highly capitalized blue-chip companies listed on London Stock Exchange (LSE)
- **Weighting method:** Free-float market-capitalization
- **Periodic review:**
 - Quarterly basis in March, June, September and December.
 - Any constituent changes will be implemented after the close of the third Friday of the review month.
- The index meets the **IOSCO Principles for Financial Benchmarks**
- **Information Access:** FTSE Russell website (<https://www.ftserussell.com/>), and IT vendors like Bloomberg (UKX<INDEX>) and Reuters (.FTSE), etc.

FTSE[®] 100 Index (cont.)

- The index value ranging from 986.9 to 7,877.45 since its launch
- Closing value on September 25, 2020: 5,842.67



FTSE[®] 100 Index (cont.)

■ Top 5 constituents:

Ranking	Constituent	ICB Sector	Weight %
1	AstraZeneca	Pharmaceuticals & Biotechnology	7.22
2	GlaxoSmithKline	Pharmaceuticals & Biotechnology	4.78
3	HSBC	Banks	4.43
4	British American Tobacco	Tobacco	3.81
5	Diageo	Beverages	3.79
Total			24.03

Source: FTSE 100 Index Factsheet, 31 August 2020

■ Other global well-known companies:

BP, Aviva, Barclays, Burberry Group, InterContinental Hotels Group, Prudential, Rio Tinto, Rolls-Royce Holdings, RBS, and Shell, etc.

Index Weightings

■ Sector Breakdown:

- Highest weight in Financial Sector, while lower weight in Technology Sector (Telecommunications & Technology, 3.5% in total)
- Oil & Gas Sector weights the 6th largest

FTSE® Index Constituents Sector Weights (%)

Banks, Insurance, & Financial Services	17.8	Industrial Goods & Services	9.5	Media	4.1	Construction & Materials	1.5
Health Care	13.1	Oil & Gas	9.1	Utilities	3.8	Real Estate	1.2
Personal & Household Goods	12.8	Retail	4.6	Travel & Leisure	3.8	Technology	0.9
Basic Resource	9.8	Food & Beverage	4.5	Telecommunications	2.6	Chemicals	0.8

Source: FTSE 100 Index Factsheet, 31 August 2020

Industry Breakdown Cross Indices

- FTSE® 100 Index weights most in financial industry, unlike TAIFEX's existing overseas products with higher weightings in technology industry.

Unit: %

FTSE 100		DJIA		Nasdaq-100		S&P 500		TOPIX		TAIEX	
Banks, Insurance & Financial Services	17.8	Information Technology	24.4	Technology	56.8	Information Technology	28.7	Electric Appliances	15.8	Semiconductor	37.3
Health Care	13.1	Health Care	18.6	Consumer Services	21.9	Health Care	14.0	Information & Communication	10.8	Finance & Insurance	11.8
Personal & Household Goods	12.8	Industrials	14.9	Health Care	7.1	Consumer Discretionary	11.4	Chemicals	7.2	Electronic Parts & Components	5.5
Basic Resources	9.8	Consumer Discretionary	14.1	Consumer Goods	6.7	Communication Services	11.1	Transportation Equipment	7.0	Computers & Peripheral Equipment	5.4
Industrial Goods & Services	9.5	Financials	12.1	Industrials	5.3	Financials	9.6	Pharmaceutical	6.8	Communication & Internet	4.8
Total	63.0	Total	84.1	Total	97.8	Total	74.8	Total	47.6	Total	64.8

Source: official factsheets of the index, 31 August 2020*

* Nasdaq-100 Index & TOPIX Factsheets as of June and July 2020, respectively.

Index Volatility

- Since 2010, the annual volatility of FTSE® 100 Index is around 16%
- During COVID-19 pandemic period this year, the index volatility climbed to 35%. Brexit also resulted in higher volatility in 2016.

Volatility	FTSE 100	DJIA	Nasdaq-100	S&P 500	TOPIX	TAIEX
2010	0.17	0.16	0.19	0.18	0.17	0.16
2011	0.21	0.21	0.23	0.23	0.22	0.22
2012	0.14	0.12	0.15	0.12	0.15	0.16
2013	0.12	0.10	0.12	0.11	0.23	0.12
2014	0.11	0.11	0.14	0.11	0.18	0.11
2015	0.17	0.15	0.18	0.15	0.19	0.16
2016	0.17	0.12	0.16	0.13	0.26	0.13
2017	0.09	0.07	0.10	0.07	0.11	0.08
2018	0.13	0.18	0.22	0.17	0.17	0.16
2019	0.12	0.12	0.16	0.12	0.13	0.11
2020(-8/31)	0.35	0.43	0.40	0.39	0.25	0.25
2010 to now	0.16	0.17	0.19	0.17	0.19	0.15



Contract Specifications

Contract Specifications

- **Underlying Index:** FTSE[®] 100 Index
- **Ticker Symbol:** F1F
- **Multiplier:** TWD 50
 - The contract value of TAIFEX FTSE 100 Index Futures was around TWD 292,000 (≐USD 10,070), as the index value closed at 5,842.67 points on September 25, 2020.
 - Small contract size features lower entry barrier, better trading flexibility as well as higher capital efficiency.
- **Minimum Price Fluctuation:** 1 index point (TWD 50)

Contract Specifications (cont.)

■ Trading Hours:

- Regular trading session: 8:45am to 1:45pm
- After-hours trading session: 3pm to 5am of the following day.
Trading of the expiring contract on the last trading day ends at 6:15pm (5:15pm during British Summer Time)
 - Covering the US and the UK equity markets' trading hours enables traders to timely adjust their positions and conduct risk management.*¹
 - The earliest time for the final settlement price is determined at 6:15 pm*²; hence, the expiring contract trades until 6:15 pm.

*1. Trading hours of the UK equity market is from 4pm to 0:35am the next day Taiwan Time (3pm to 11:35pm during British Summer Time); trading hours of the ICE Europe FTSE[®] 100 Index Futures is from 9am to 5am the next day (8am to 4am the next day during British Summer Time). British Summer Time is from the last Sunday of March to the last Sunday of October.

*2. For ICE Europe FTSE[®] 100 Index Futures settlement, LSE conducts an intraday auction in each of the FTSE 100 shares on the third Friday every month, called Exchange Delivery Settlement Price Auction (EDSP Auction). The EDSP Auction begins at 10:10am London Time (5:10pm or 6:10pm Taiwan Time), and completes at 10:15am to 10:29am (5:15pm to 5:29pm or 6:15pm to 6:29pm Taiwan Time).

Contract Specifications (cont.)

■ Last Trading Day:

- The 3rd Friday of the delivery month. Trading of the expiring contract on the last trading day ends at 6:15pm (5:15pm during British Summer Time).
- The 3rd Friday falls on a scheduled non-trading day:
 1. British holiday, i.e. a non-trading day of the underlying cash market
➡ the last trading day shall be adjusted to the preceding trading day of the underlying cash market.
 2. Taiwan holiday, i.e. a non-business day of TAIFEX ➡ No adjustment.
- The 3rd Friday falls on an unexpected holiday due to typhoon or other force majeure events ➡ No adjustment.

■ Final Settlement Day: The 1st TAIFEX business day following the last trading day

Contract Specifications (cont.)

- **Final Settlement Price:** The Expiry Value for the FTSE® 100 Index calculated by FTSE International Limited on the last trading day
- **Delivery Months:** Four consecutive quarterly months of March, June, September, and December
- **Daily Price Limit:** 3-level price limits at $\pm 7\%$, $\pm 13\%$ and $\pm 20\%$ of the daily settlement price of the preceding regular trading session
- **Daily Settlement Price:** The volume-weighted average price, calculated by dividing the value of trades by the volume within the last one minute
- **Settlement:** Cash settlement



Trading Scheme

Trading Scheme (1)

- **The Order Types 、 Matching Principles**
 - Same as other foreign equity index futures of Taifex
- **Information Disclosure before market open**
 - Orders are accepted from 8:30 to 8:45 and 14:50 to 15:00 before opening, and disclosure include the total number of bid/ask orders, the cumulative quantity of bid/ask orders, the calculated opening prices and volume, the best 5 bid/ask prices and corresponding volumes of simulated matching every 5 seconds for each contract.
 - 2 minutes prior to opening of trading session(8:43~8:45 and 14:48~15:00), orders can only be entered, but not deleted or modified.

Trading Scheme (2)

- **FTSE® 100 Index Futures is applicable for Dynamic Price Banding Mechanism**

	Outright	Spread
Rejection Threshold	2%	1%

- **Marker Maker**

- A futures dealer may apply to become a TAIFEX FTSE® 100 Index Futures market maker and engage in market making business after obtaining approval from the TAIFEX.

- **Block Trade**

- The block trade Minimum Thresholds of FTSE® 100 Index Futures is 200 lots.

Trading Scheme (3)

- **Position Limits**

- The position limits for FTSE® 100 Index Futures are 1,000 lots for Individual, 3,000 lots for Institution and 9,000 lots for Proprietary

Category	Individual	Institution	Proprietary Trader/Market Maker
Position Limits	1,000 Lots	3,000 Lots	9,000Lots



Clearing Mechanism

Clearing Mechanism

- Margining Requirements, Adjustment and Calculation
- Daily Settlement Operation and Position Handling
- Settlement on the Expiration Date
- Risk Management to Clearing Members
- Risk Management of FCM to it's Clients

Margining Requirements, Adjustment and Calculation

■ Margin Calculation and Adjustment

- The calculation of the risk coefficient of margins for futures contracts is based on the price movements of the futures contract within a certain period, anti-procyclicality and other possible factors with at least a 99 percent confidence interval to cover two-day price variation.
- If the difference between the current clearing margin level and the level calculated daily reaches 10 percent or more, or when necessary based on market conditions, the TAIFEX may adjust the collection level of the clearing margin.

■ The TAIFEX calculates and collects required margin from clearing members based on the Standard Portfolio Analysis of Risk (SPAN) method.

■ The FCM shall stipulate with the trader that the margin shall be collected in accordance with the standards prescribed by the TAIFEX or the standards as prescribed under the SPAN margin calculation method.

■ Margin Requirements of Spread Trading

- Identical products

Order and Portfolio	Margin Requirement	Note
Buying one F1F and selling one F1F	Margin of one F1F position	Applicable only to combinations having different expiration dates.

Daily Settlement Operation and Position Management

■ Daily Settlement Operation

- The business hours of daily settlement operation start at 13:45, the same time as current equity index products which close at 13:45

■ Position Management

- The business hours of TAIFEX to accept that FCM submit the results of position management for F1F start from 7:00 am to 2:30 pm, the same time as current equity index products which close at 13:45
- After the close of the after-hours trading session on the last trading day, the time frame of submitting the results of position management for the expiring F1F start from 7am to 9:30am on the final settlement date.

Settlement on the Expiration Date

■ Settlement on the Expiration Date

- F1F shall be settled in cash on the expiration day
- The open positions of the expiring contracts are settled with the trader delivering or receiving the net amount of the price differential based on the final settlement price.
- The business hours of settlement on the last settlement day (the next day following the last trading date) start at 9:30 am.

■ The Calculation Method of Contract Value on the Expiration Day

- Each contract value of the expiry position equals the final settlement price of the contract multiplied by the value of each point of the index, with amounts of less than NT\$1.00 unconditionally rounded down.

Risk Management to Clearing Members

■ Order Management Procedure

- The required clearing margin of new orders of the clearing member shall not be greater than its excess margin.
- If the clearing margin required for the newly added position of a clearing member exceeds the total amount of its excess clearing margin, the TAIFEX may provisionally refrain from restricting the clearing member from adding new positions, within an amount up to 20% of the excess clearing margin at the deadline for depositing the post-trading margin call for the regular trading session

■ Position Concentration Management

- If the risk exposure of the clearing member's open positions reaches 20 percent of the risk exposure of all open positions in the whole market, the TAIFEX may collect extra clearing margin.

Risk Management of FCM to it's Clients

■ Margin Check of a New Order

- A FCM adopts the marked-to-market approach to calculate gains, loss and available margins of the trader by market price of F1F open positions held by the trader in regular trading session and after-hour trading session.

■ High-risk-account notification

- If a trader's equity falls below the maintenance margin of the trader's open positions in regular trading session and after-hour trading session, the FCM shall issue a high-risk-account notification to the trader.

■ Liquidation on behalf of a trader

- A FCM shall calculate a trader's risk indicator by market price including F1F open positions held by the trader in regular trading session and after-hour trading session.
- If a trader's risk indicator drops below the standard(ex:25%) stipulated with the FCM in regular trading session, the FCM shall liquidate all open positions of the trader in products that are still trading.
- F1F is applied to the product not exempted from liquidation on behalf of a principal in the after-hour. If a trader's risk indicator drops below the standard stipulated with the FCM in after-hour trading session, the FCM shall liquidate all open positions of the trader in products not exempted from liquidation on behalf of a principal in the after-hour that are still trading.



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Thank You