

## WFE Statistics Definitions Manual (Revised July 2019)

The World Federation of Exchanges' member exchanges have reached general agreement on the following statistical definitions. The WFE encourages all reporting exchanges (which includes WFE members, affiliates and non-members) to comply with these definitions to ensure comparability and consistency. Where we are aware of exceptions, we note this in this document or in footnotes in the WFE statistics database.

WFE data goes back many years and in that time, the reporting entity may have changed as a result of mergers/acquisitions or other activity. We present an overview of exchange groupings in [Appendix 3: Note on exchange groupings](#).

WFE data is presented according to the following hierarchy:

### Asset class – Product – Indicator

The following tables set out the indicators that are collected from WFE members, the format of their presentation and the frequency of their collection.

Asset Class		
<b>EQUITY</b>		
Product		
<i><u>Total Equity Market</u></i>		
Indicators	Indicator type	Frequency
Market capitalisation	Monetary (000 000)	Monthly and Annual
Market capitalisation of new listings	Monetary (000 000)	Annual
Market capitalisation of delistings	Monetary (000 000)	Annual
Number of listed companies (Domestic)	Full number	Monthly and Annual
Number of listed companies (Foreign)	Full number	Monthly and Annual
Number of listed companies (Total)	Full number	Monthly and Annual
Value traded (EOB Domestic)	Monetary (000 000)	Monthly and Annual
Value traded (EOB Foreign)	Monetary (000 000)	Monthly and Annual
Value traded (EOB Total)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated Deals Domestic)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated Deals Foreign)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated Deals Total)	Monetary (000 000)	Monthly and Annual
Value traded (Reported Trades Domestic)	Monetary (000 000)	Monthly and Annual
Value traded (Reported Trades Foreign)	Monetary (000 000)	Monthly and Annual
Value traded (Reported Trades Total)	Monetary (000 000)	Monthly and Annual
Number of trades (EOB)	Decimal (000)	Monthly and Annual
Number of trades (Negotiated Deals)	Decimal (000)	Monthly and Annual

Number of trades (Reported Trades)	Decimal (000)	Monthly and Annual
Number of shares traded (EOB)	Decimal (000 000)	Annual
Number of shares traded (Negotiated Deals)	Decimal (000 000)	Annual
Number of shares traded (Reported Trades)	Decimal (000 000)	Annual
Number of shares traded (Total)	Decimal (000 000)	Annual
Number of new listings through IPO (Domestic)	Full number	Monthly and Annual
Number of new listings through IPO (Foreign)	Full number	Monthly and Annual
Number of new listings through IPO (Total)	Full number	Monthly and Annual
Number of new listings not through IPO (Domestic)	Full number	Monthly and Annual
Number of new listings not through IPO (Foreign)	Full number	Monthly and Annual
Number of new listings not through IPO (Total)	Full number	Monthly and Annual
Number of new listings total (Domestic)	Full number	Annual
Number of new listings total (Foreign)	Full number	Annual
Number of new listings (total)	Full number	Annual
Number of delistings (Domestic)	Full number	Annual
Number of delistings (Foreign)	Full number	Annual
Number of delistings (Total)	Full number	Annual
Capital raised through IPO (Newly issued shares)	Monetary (000 000)	Monthly and Annual
Capital raised through IPO (Already issued shares)	Monetary (000 000)	Monthly and Annual
Capital raised through IPO (Total)	Monetary (000 000)	Monthly and Annual
Capital raised by already listed companies (Newly issued shares)	Monetary (000 000)	Monthly and Annual
Capital raised by already listed companies (Already issued shares)	Monetary (000 000)	Monthly and Annual
Capital raised by already listed companies (Total)	Monetary (000 000)	Monthly and Annual
Capital raised (Total)	Monetary (000 000)	Monthly and Annual
Number of trading days	Full number	Monthly and Annual
Total Equity Market - Share in total market cap of the 5% most capitalised domestic co.	Percentage	Annual
Total Equity Market - Share in total trading value of the 5% most traded domestic co.	Percentage	Annual
Total Equity Market - Share in total market cap of the top 10 most capitalised domestic co.	Percentage	Annual
Total Equity Market - Share in total trading value of the top 10 most traded domestic co.	Percentage	Annual
Number of trading participants	Full number	Annual
Share turnover velocity	Percentage	Monthly and Annual
Number of listed domestic co. with share listed distributing dividends during the year	Full number	Annual
Total amount of net dividend paid during the year	Monetary ( 000 000 )	Annual
Total amount of gross dividend paid during the year	Monetary ( 000 000 )	Annual
Gross dividend yield	Percentage	Annual
Net dividend yield	Percentage	Annual

Average of the market Price/Earning Ratio (PER) at year-end	Decimal	Annual
<b>Product</b>		
<b><u>Alternative &amp; SME</u></b>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Market capitalisation	Monetary (000 000)	Annual
Number of listed companies (Domestic)	Full number	Annual
Number of listed companies (Foreign)	Full number	Annual
Number of listed companies (Total)	Full number	Annual
Number of newly listed companies (Domestic)	Full number	Annual
Number of newly listed companies (Foreign)	Full number	Annual
Number of newly listed companies (Total)	Full number	Annual
Number of delistings (Domestic)	Full number	Annual
Number of delistings (Foreign)	Full number	Annual
Number of delistings (Total)	Full number	Annual
Value traded (EOB domestic)	Monetary (000 000)	Annual
Value traded (EOB foreign)	Monetary (000 000)	Annual
Value traded (EOB total)	Monetary (000 000)	Annual
Value traded (Negotiated Deals domestic)	Monetary (000 000)	Annual
Value traded (Negotiated Deals foreign)	Monetary (000 000)	Annual
Value traded (Negotiated Deals total)	Monetary (000 000)	Annual
Value traded (Reported Trades domestic)	Monetary (000 000)	Annual
Value traded (Reported Trades foreign)	Monetary (000 000)	Annual
Value traded (Reported Trades total)	Monetary (000 000)	Annual
Capital raised (by already listed companies)	Monetary (000 000)	Annual
Capital raised (by newly admitted companies)	Monetary (000 000)	Annual
Capital raised (Total)	Monetary (000 000)	Annual
Number of listed domestic co. with share listed distributing dividends during the year	Full number	Annual
Total amount of net dividend paid during the year	Monetary ( 000 000 )	Annual
Total amount of gross dividend paid during the year	Monetary ( 000 000 )	Annual
Gross dividend yield	Percentage	Annual
Net dividend yield	Percentage	Annual
<b>Product</b>		

<b><i>Product: Broad Stock Index</i></b>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Value	Decimal	Monthly and Annual
<b>Product</b>		
<b><i>Product: Blue Chip Index</i></b>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Value	Decimal	Monthly and Annual
Volatility	Percentage	Monthly and Annual
<b>Product</b>		
<b><i>Product: Median Simple Spread</i></b>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Median Simple Spread – Large Cap	Decimal	Monthly
Median Simple Spread – Mid Cap	Decimal	Monthly
Median Simple Spread – Small Cap	Decimal	Monthly
Median Simple Spread – Micro Cap	Decimal	Monthly

<b>Product</b>		
<b><i>Product: Granular IPO level capital raised</i></b>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Granular IPO level capital raised - Market Capitalisation on 1st trading day	Monetary ( 000 000 )	Monthly
Granular IPO level capital raised - Capital raised through IPO (Newly issued shares)	Monetary ( 000 000 )	Monthly
Granular IPO level capital raised - Capital raised through IPO (Already issued shares)	Monetary ( 000 000 )	Monthly
Company name	Text	Monthly
Foreign/Domestic	Text	Monthly
Listing date	Text	Monthly
Listing venue	Text	Monthly
ISIN	Text	Monthly
Type of company	Text	Monthly

<b>Asset Class</b>		
<b><u>ASSET</u> Class - Derivatives</b>		
<b>Products</b>		
SINGLE STOCK OPTIONS & FUTURES		
STOCK INDEX OPTIONS & FUTURES		
ETF OPTIONS & FUTURES		
INTEREST RATE OPTIONS AND FUTURES - SHORT TERM INTEREST RATE OPTIONS AND FUTURES - LONG TERM INTEREST RATE OPTIONS AND FUTURES		
CURRENCY OPTIONS AND FUTURES		
COMMODITY OPTIONS AND FUTURES - PRECIOUS METALS OPTIONS AND FUTURES - NON-PRECIOUS METALS OPTIONS AND FUTURES - ENERGY OPTIONS AND FUTURES - AGRICULTURE OPTIONS AND FUTURES - INDEX COMMODITY DERIVATIVES OPTIONS AND FUTURES		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Contracts traded	Full number	Monthly and Annual
Notional Value	Monetary (000 000)	Monthly and Annual
Open Interest	Full number	Monthly and Annual

Asset Class		
<b>BONDS</b>		
Product		
<u>Product - Bonds</u>		
Indicators	Indicator type	Frequency
Number listed (Domestic private sector)	Full number	Monthly and Annual
Number listed (Domestic public sector)	Full number	Monthly and Annual
Number listed (Foreign)	Full number	Monthly and Annual
Number listed (Total)	Full number	Monthly and Annual
Number of new listings (Domestic private sector)	Full number	Monthly and Annual
Number of new listings (Domestic public sector)	Full number	Monthly and Annual
Number of new listings (Foreign)	Full number	Monthly and Annual
Number of new listings (Total)	Full number	Monthly and Annual
Value traded (EOB domestic private sector)	Monetary (000 000)	Monthly and Annual
Value traded (EOB domestic public sector)	Monetary (000 000)	Monthly and Annual
Value traded (EOB foreign)	Monetary (000 000)	Monthly and Annual
Value traded (EOB total)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated deals domestic private sector)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated deals domestic public sector)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated deals foreign)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated deals total)	Monetary (000 000)	Monthly and Annual
Value traded (Total domestic private sector)	Monetary (000 000)	Monthly and Annual
Value traded (Total domestic public sector)	Monetary (000 000)	Monthly and Annual
Value traded (Total foreign)	Monetary (000 000)	Monthly and Annual
Value traded (Total)	Monetary (000 000)	Monthly and Annual
Number of trades (EOB)	Decimal (000)	Monthly and Annual
Number of trades (Negotiated deals)	Decimal (000)	Monthly and Annual
Number of trades (Total)	Decimal (000)	Monthly and Annual
Number of bonds issuers (Domestic private sector)	Full number	Annual
Number of bonds issuers (Domestic public sector)	Full number	Annual
Number of bonds issuers (Foreign)	Full number	Annual
Number of bonds issuers (Total)	Full number	Annual
Value of listings (Domestic private sector)	Monetary (000 000)	Annual
Value of listings (Domestic public sector)	Monetary (000 000)	Annual

Value of listings (Foreign)	Monetary (000 000)	Annual
Value of listings (Total)	Monetary (000 000)	Annual
Bonds - Capital raised (Domestic private sector)	Monetary (000 000)	Annual
Bonds - Capital raised (Domestic public sector)	Monetary (000 000)	Annual
Bonds - Capital raised (Foreign)	Monetary (000 000)	Annual
Bonds - Capital raised (Total)	Monetary (000 000)	Monthly and Annual

<b>Asset Class</b>		
<b>OTHER</b>		
<b>Product</b>		
<i><b>Product – Exchange Traded Funds</b></i>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Number listed	Full number	Monthly and Annual
Value traded (EOB)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated Deals)	Monetary (000 000)	Monthly and Annual
Value traded (Total)	Monetary (000 000)	Monthly and Annual
Number of trades (EOB)	Decimal (000)	Monthly and Annual
Number of trades (Negotiated Deals)	Decimal (000)	Monthly and Annual
Number of trades (Total)	Decimal (000)	Monthly and Annual
<b>Product</b>		
<i><b>Product – Investment Funds</b></i>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>
Number of listed funds	<b>Full number</b>	Monthly and Annual
Value traded (EOB)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated Deals)	Monetary (000 000)	Monthly and Annual
Value traded (Total)	Monetary (000 000)	Monthly and Annual
Number of trades (EOB)	Decimal (000)	Monthly and Annual
Number of trades (Negotiated Deals)	Decimal (000)	Monthly and Annual
Number of trades (Total)	Decimal (000)	Monthly and Annual
<b>Product</b>		
<i><b>Product – Securitised derivatives</b></i>		
<b>Indicators</b>	<b>Indicator type</b>	<b>Frequency</b>

Number listed	Full number	Monthly and Annual
Value traded (EOB)	Monetary (000 000)	Monthly and Annual
Value traded (Negotiated Deals)	Monetary (000 000)	Monthly and Annual
Value traded (Total)	Monetary (000 000)	Monthly and Annual
Number of trades (EOB)	Decimal (000)	Monthly and Annual
Number of trades (Negotiated Deals)	Decimal (000)	Monthly and Annual
Number of trades (Total)	Decimal (000)	Monthly and Annual



## Definitions

### **Asset class - Equity**

#### **Products:**

**Total Equity Market**

**Alternative & SME**

Where the same indicators appear in both Total Equity Market and Alternative & SME, the applicable definitions are the same.

Unless indicated otherwise:

- all Total Equity Market figures include the Main/Official market and any Alternative/SME markets supervised and regulated by the Exchange;
- all Alternative & SME figures apply only to the Alternative/SME markets supervised and regulated by the Exchange.

### **Indicator: Market capitalisation**

Market capitalisation is the total number of issued shares of [Domestic Companies](#), including their several classes, multiplied by their respective prices at a given time. This figure reflects the comprehensive value of the market at that time.

The market capitalisation figures include:

- shares of listed [Domestic Companies](#)
- common and preferred shares of [Domestic Companies](#)
- shares without voting rights of [Domestic Companies](#)

The market capitalisation figures exclude:

- collective investment funds including ETFs;
- rights, warrants, convertible instruments;
- options, futures;
- shares of [Foreign Companies](#);
- companies whose only business goal is to hold shares of other listed companies, such as holding companies and investment companies;
- companies admitted to trading (companies admitted to trading are companies whose shares are traded at the exchange but not listed at the exchange)

The universe of domestic listed companies should be the basis of the domestic market capitalisation.

#### **Example**

Company	Share class	Number of shares	Price	Share class market cap	Company market cap	Exchange market cap
Company A	Ordinary shares	100	2	200	Included	
<b>Company A total</b>					200	<b>200</b>
Company B	Ordinary shares	300	2	600	Included	
<b>Company B total</b>					600	<b>600</b>
Company C	Preference shares	150	1	150	Included	
<b>Company C total</b>					150	<b>150</b>
Company D (foreign company exclusively quoted)	Ordinary shares	100	4	400	Included	
<b>Company D total</b>					400	<b>400</b>
<b>Total exchange market capitalisation</b>						<b>1 350</b>

**Indicator: Market capitalisation of new listings****Indicator: Market capitalisation of delistings**

The market capitalisation of new listings is the total number of newly listed, issued shares multiplied by their value on the first day of quotation.

The market capitalisation of delistings is the total number of issued shares multiplied by their value on the last day of quotation.

**Examples**

Company	Share class	Number of newly listed shares	Issuing price	Company market cap	Newly listed market cap on exchange
Company A	Ordinary shares	100	2	200	
<b>Company A total</b>					<b>200</b>
Company B	Ordinary shares	300	2	600	
<b>Company B total</b>					<b>600</b>
Company C	Ordinary shares	100	1	100	
Company C	Preference shares	50	1	50	
<b>Company C total</b>					<b>150</b>
<b>Total new exchange market capitalisation</b>					<b>950</b>

Company	Share class	Number of delisted shares	End of day price (last day of quotation)	Company market cap delisted	Delisted market cap on exchange
Company A	Ordinary shares	25	3	75	
<b>Company A total</b>					<b>75</b>
Company B	Preference shares	150	1	150	
<b>Company B total</b>					<b>150</b>
Company C	Ordinary shares	200	1	200	
<b>Company C total</b>					<b>200</b>
<b>Total market cap delisted</b>					<b>425</b>

**Indicator: Number of listed companies (Domestic)****Indicator: Number of listed companies (Foreign)****Indicator: Number of listed companies (Total)**

This is the number of companies which have shares (including their several classes) listed on an exchange at the end of the period, split into [Domestic Companies](#) and [Foreign Companies](#). The number excludes investment funds, ETFs, unit trusts, and companies whose only business goal is to hold shares of other listed companies, such as holding companies and investment companies. A company with several classes of shares is counted just once. Only companies admitted to listing are included.

The Total Number of listed companies is calculated by summing the Number of listed [Domestic Companies](#) and the Number of listed [Foreign Companies](#).

**Example**

Company	Number of domestic companies listed	Number of foreign companies listed
Domestic company A with ordinary shares or with preference shares	1	
Domestic company B with preference shares	1	
Foreign company A with ordinary shares		1
Foreign company B with ordinary shares		1
<b>Domestic / foreign sub-totals</b>	<b>2</b>	<b>2</b>
<b>Total</b>		<b>4</b>

**Indicators: Value traded (EOB, Domestic, Foreign and Total)****Indicators: Value traded (Negotiated Deals, Domestic, Foreign and Total)****Indicators: Value traded (Reported Trades, Domestic, Foreign and Total)**

The value traded is the total number of shares traded, multiplied by their respective matching prices. The data includes trades in companies admitted to listing and companies admitted to trading.

In order to achieve a more complete view of market activity, Value Traded is split into three main categories of trades according to the facility / means used to execute the trade, namely [Electronic Order Book \(EOB\)](#), [Negotiated Deals](#), [Reported Trades](#).

Across all of these dimensions, the value traded is further broken down into the value traded in [Domestic Companies](#) and [Foreign Companies](#).

Figures are single counted (i.e., includes one side of the transaction only).

Totals are provided within EOB, Negotiated Deals and Reported Trades but are not summed across EOB, Negotiated Deals and Reported Trades.

Trade	Buyer	Seller	Platform	Number of shares	Price	Electronic order book	Negotiated deals	Reported trades
						Turnover	Turnover	Turnover
A	Member A	Member B	Order book	10	1	10		
B	Member A	Member B	Bi-lateral negotiation	20	2		40	
C	Member A	Non - Member	Bi-lateral negotiation	30	3		90	
D	Member B	Member A	Order book	40	1	40		
E	Member B	Member A	Bi-lateral negotiation	50	2		100	
F	Member B	Non - Member	Bi-lateral negotiation	60	3		180	
G	Member / non - member	Member / non - member	Trade Reporting Facility	15	5			75
<b>Sub-totals</b>						<b>50</b>	<b>410</b>	<b>75</b>

**Indicator: Number of trades (EOB)****Indicator: Number of trades (Negotiated Deals)****Indicator: Number of trades (Reported Trades)**

The number of trades represents the actual number of transactions which have occurred during the period on the relevant Exchange. The number is single counted (i.e., includes one side of the transaction only). The data includes trades in companies admitted to listing and admitted to trading broken out into [Domestic Companies](#) and [Foreign Companies](#).

The data is presented according to the facility/means used to execute the trade, namely:

- [Electronic Order Book \(EOB\)](#)
- [Negotiated Deals](#)
- [Reported Trades](#)

**Indicator: Number of new listings through IPO (Domestic)****Indicator: Number of new listings through IPO (Foreign)****Indicator: Number of new listings through IPO (Total)**

The number of companies, split between [Domestic Companies](#) and [Foreign Companies](#), whose shares were admitted to listing during the period through an offer of subscription and/or sales of shares ([Initial Public Offering](#)). A company with several classes of shares is just counted once. Only companies admitted to listing are included in the data.

The Total Number of new listings through IPO is calculated by summing the Number of new listings through IPO (Domestic) and the Number of new listings through IPO (Foreign).

**Indicator: Number of new listings not through IPO (Domestic)**

**Indicator: Number of new listings not through IPO (Foreign)**

**Indicator: Number of new listings not through IPO (Total)**

The number of companies, split between [Domestic Companies](#) and [Foreign Companies](#)[Error! Reference source not found.](#), whose shares were admitted to listing during the period through a procedure other than an Initial Public Offering[Error! Reference source not found.](#) (e.g. splits, mergers, or having already floated shares). A company with several classes of shares is just counted once.

Only companies admitted to listing are included in the data.

The Total Number of new listings not through IPO is calculated by summing the Number of new listings not through IPO (Domestic) and the Number of new listings not through IPO (Foreign).

*Example*

Company	New domestic company (IPO)	New foreign company (IPO)	Total	Other new domestic company	Other new foreign company	Total
Domestic company A	1		1	1		1
Domestic company B	2		2	4		4
Foreign company A		10	10		2	2
Foreign company B		2	2		6	6
<b>Total</b>	<b>3</b>	<b>12</b>	<b>15</b>	<b>5</b>	<b>8</b>	<b>13</b>

**Indicator: Number of new listings (Domestic public sector)**

**Indicator: Number of new listings (Domestic private sector)**

**Indicator: Number of new listings total (Foreign)**

**Indicator: Number of new listings (Total)**

The number of companies, split between [Domestic Companies](#) and [Foreign Companies](#), whose shares were admitted to listing during the period whether through an [Initial Public Offering](#) or other process (e.g. splits, mergers, or having already floated shares). A company with several classes of shares is just counted once.

The Number of new listings (Total) is calculated by summing the Number of new listings total (Domestic) and the Number of new listings total (Foreign).

Only companies admitted to listing are included in the data.

**Indicator: Number of delistings (Domestic)**

**Indicator: Number delistings (Foreign)**

**Indicator: Number delistings (Total)**

The number of companies, split between [Domestic Companies](#) and [Foreign Companies](#)[Error! Reference source not found.](#), removed from listing and trading during the period in question.

The Number of delistings (Total) is calculated by summing the Number of delistings (Domestic) and the Number of delistings total (Foreign).

These indicators are only collected annually.

**Indicator: Capital raised through IPO (Newly issued shares)**

**Indicator: Capital raised through IPO (Already issued shares)**

**Indicator: Capital raised through IPO (Total)**

**Indicator: Capital raised by already listed companies (Newly issued shares)**

**Indicator: Capital raised by already listed companies (Already issued shares)**  
**Indicator: Capital raised by already listed companies (Total)**

The aggregated value of money raised through an [Initial Public Offering](#) or an offer by already listed companies. The shares offered for sale may be already issued or newly issued shares. The figure is calculated by multiplying the number of shares that were placed by the offer price. Only the companies admitted to listing are included. Companies admitted to listing in Exchange A and admitted to trading in exchange B are not included in the statistics of exchange B.

When possible, private placements are excluded from the investment flow statistics. If it is not possible for an exchange to exclude them, a special footnote with an explanation must be added. A private placement is an issue of new shares or a sale of already issued shares reserved for restricted number of investors. Greenshoe (over-allotment) options are excluded from investment flows.

Listing transfers from one regulated market to another are not included in investment flows as they do not have any impact on the WFE global market capitalisation.

The following table describes, for each type of corporate action, in which category the flow of money has to be classified:

	IPOs		Already listed companies		Exclusions
	Newly issued shares	Already issued shares	Newly issued shares	Already issued shares	
<b>IPOs (1)</b>					
Sale to the public of already issued shares by a previously non listed co.		✓			
Sale to the public of newly issued shares by a previously non listed co. (capital increase through an IPO)	✓				
<b>Secondary offers</b>					
Sale to the public of already issued shares by an already listed co. (free float changing)				✓	
Sale to the public of newly issued shares by by an already listed co. (capital increase)			✓		
Repurchase of listed shares (delistings)					✗
<b>Mergers or takeovers of two companies A and B</b>					
A and B were already listed on that market - The new entity is listed					✗
A and B were already listed on that market - The new entity is not listed					✗
A was already listed and B was not listed - The new entity is listed			✓ (if A issues new shares to pay for the acquisition)	✓ (B shares value)	
A was already listed and B was not listed - The new entity is not listed					✗
<b>Rights Issue</b>					
Exercise of Rights Issue of X shares per Y at W price			✓		
Bonus issue X new share for every Y shares held					✗
<b>Stock options</b>					
Exercise of stock options leading to the creation of new shares			✓		
<b>Spin-off of company B by a listed company A</b>					
New company B remains listed on that market					✗
New company B is not listed					✗
<b>Split</b>					
Stock split of x new for y old					✗
Reverse split x new for y old					✗
<b>Dividend</b>					
In shares					✗

(1) NB: It is possible that an IPO may list a combination of new shares and already issued shares

**Indicator: Share in total market cap of the 5% most capitalised domestic co.**  
**Indicator: Share in total trading value of the 5% most traded domestic co.**

**Indicator: Share in total market cap of the top 10 most capitalised domestic co.**  
**Indicator: Share in total trading value of the top 10 most traded domestic co.**

Definition

Market concentration shows:

- the contribution of the top 5% of listed [Domestic Companies](#) by market capitalisation and value traded respectively to total market capitalisation and value traded.
- the contribution of the 10 largest listed [Domestic Companies](#) by market capitalisation and value traded respectively to total market capitalisation and value traded.

This information is expressed as a percentage.

Example (concentration of market cap. in top 5% most heavily capitalised)

Total number of domestic companies	Top 5% of listed domestic companies	Market cap of these 5% companies (USD m)	Total domestic market cap	Concentration of market cap. in top 5% most heavily capitalised companies
500	25	235,000	500,000	47.0%

Example (concentration of turnover value in top 5% most traded companies)

Total number of domestic companies	Top 5% of listed domestic companies	Turnover value of the 5% companies (USD m)	Total domestic turnover	Concentration of turnover value in top 5% most traded companies
500	25	55,000	85,000	65.7%

Example (concentration of market cap. in top 10 most heavily capitalised companies)

Total number of domestic companies	Top 10 listed domestic companies by market cap	Market cap of the top 10 companies (USD m)	Total domestic market cap	Concentration of market cap. in top 10 most heavily capitalised companies
500	10	75,000	500,000	15.0%

Example (concentration of turnover value in top 10 most traded companies)

Total number of domestic companies	Top 10 listed domestic companies by turnover	Turnover value of the top 10 companies (USD m)	Total domestic turnover	Concentration of turnover value in top 10 most traded companies
500	10	25,000	85,000	29.4%

**Indicator: Number of trading participants**

Trading participants are the number of dealers, brokers, brokers-dealers, and individuals acting as principals who trade on the exchange through direct access to the trading system. Clearing and settlement members are excluded. Several branches of a same organization have the right to apply as trading member to an exchange, and each license is computed as one trading participant. For example, if two branches belonging to the same organization apply as trading members, they are counted as two trading participants.

**Indicator: Share Turnover Velocity**

Definition

The turnover velocity is the ratio between the [Electronic Order Book \(EOB\)](#) value traded of [Domestic Companies](#) and their market capitalisation. The value is annualised by multiplying the monthly average by 12, according to the following formula:

$$\frac{\text{Monthly EOB domestic share turnover}}{\text{Month-end domestic market capitalisation}} \times 12$$

### Example

Monthly domestic share turnover (USD m)	Monthly domestic market cap (USD m)	Annualized turnover velocity (simple average * 12)
2,800.0	77,540.0	43.3%

**Indicator: Number of listed domestic co. with share listed distributing dividends during the year**

**Indicator: Total amount of net dividend paid during the year**

**Indicator: Total amount of gross dividend paid during the year**

**Indicator: Gross dividend yield**

**Indicator: Net dividend yield**

Dividends distributed by [Domestic Companies](#), indicated in this table, cover ordinary and special cash dividends. In case that a company has been delisted during the year but has paid a dividend during the period, it is included in the numbers.

The gross and net dividend yields are calculated by dividing the total amount of dividends paid by the whole domestic market capitalisation of the market segment concerned. The gross dividend paid and its related yield are calculated before investor income tax payment on dividend earned; the net dividend paid and its related yield are calculated after tax.

**Indicator: Average of the market Price/Earning Ratio (PER) at year-end**

The PER is calculated by dividing the market capitalisation by the total market earnings. It concerns stocks included in the main index of the stock exchange, when possible.

### Methodology

For company A, if MV is the market value and E earnings based on last published accounts, we have :

$$PER = \frac{MV}{E}$$

In order to calculate a PER for the whole market, we recommend using a broad index sample and cumulated values for the sample.

For example, let us suppose :

j = 1, n companies of a broad index,  
MV<sub>j</sub>: market value of company j at year end T,  
E<sub>j</sub> earnings (possibly losses) of company j based on last published accounts

We have:

Company	Price	Outstanding shares	Market value	Earnings or losses	PER
	as of year-end T			last published accounts	
A	10	1 000	10 000	800	12.50
B	5	100 000	500 000	30 000	16.67
C	20	50 000	1 000 000	-1 000	-
D	25	500 000	12 500 000	900 000	13.89
E	50	35 000	1 750 000	100 000	17.50
Total			15 760 000	1 029 800	15.30

**Product: Broad Stock Index**

**Indicator: Broad Stock Index (Value)**

Broad indexes are, in general, market capitalisation-weighted, including a large sample of listed [Domestic Companies](#), as the all-share or composite indexes. They are generally recalculated to adjust to capital operations and to modifications in the company composition of the index. The index can be market capitalisation-weighted or free float based.

When the index is a price index, it measures the pure change of share prices without taking into consideration returns from dividend pay-outs.

When the index is a return index, it measures the total return of investments on the index shares, including reinvested dividends.

Some WFE member exchanges operate several markets, and report index performances on an individual basis.

*Example*

Day 1	Shares	Price	Market capitalisation	Weighting
Company A	100	1	100	10%
Company B	100	2	200	20%
Company C	300	2	600	60%
Company D	100	1	100	10%
<b>Total</b>			<b>1000</b>	<b>100%</b>
Market Cap : Index Value			<b>10 : 1</b>	
Index Value			<b>100</b>	

Day 2	Shares	Price	Market capitalisation	Weighting
Company A	100	0.5	50	5%
Company B	100	1.5	150	14%
Company C	300	2.5	750	71%
Company D	100	1	100	10%
<b>Total</b>			<b>1050</b>	<b>100%</b>
Market Cap : Index Value			<b>10 : 1</b>	
Index Value			<b>105</b>	

As can be seen from the example above, the index has changed from 100 to 105 based on the change in total market capitalisation of companies A, B, C and D.

Monthly high and low figures provided are based on all index calculations throughout the month, i.e. the calculations include intra-day figures and not just end-of-day figures.

**Product: Blue Chip Index**

**Indicator: Blue Chip Index (Value)**

A blue-chip index measures the price movements of a selected range of blue chips stocks, generally the most heavily capitalized and traded shares. Blue chips indexes often serve as underlying for derivatives (options and futures). The index can be market capitalisation-weighted or free float based.

As with the broad stock market indexes, some WFE member exchanges operate several markets, and choose to report index performances on individual basis.

**Indicator: Volatility of Blue Chip Index**

The volatility of blue chip indexes is calculated as follows:  
 Standard deviation of  $\ln((\text{index value } d / \text{index value } d-1) \dots (\text{index value } d-124 / \text{index value } d-125))$ ,  
 multiplied by the square root of 250, and multiplied by 100.  
 d = day

**Product: Median Simple Spread**

**Indicators: Median Simple Spread – Large Cap, Mid Cap, Small Cap and Micro Cap**  
**Indicators: Median Simple Spread – Top Quartile, Third Quartile, Second Quartile, Lowest Quartile**

The median simple spread (MSS) is a pre-trade liquidity measure calculated using bid/ask spread information. The information is denominated in basis points (Bps). The median simple spread is calculated



and presented per market segment, namely large cap, mid cap, small cap and micro cap. The segmentation is as follows:

- Large cap: market cap > USD 1.3 bn
- Mid cap: USD 1.3 bn > market cap > USD 200 m
- Small cap: USD 200 m > market cap > USD 65 m
- Micro cap: market cap < USD 65 m

Larger markets also split the Large Cap segment into quartiles and provide MSS data for each of the Large Cap quartiles.

The formula for calculating MSS is:

$$[(\text{Best Ask Price} - \text{Best Bid Price}) / ((\text{Best Ask Price} + \text{Best Bid Price}) / 2)] * 10000$$

In addition to the relevant MSS figures for each segment and quartile, exchanges also provide information about the Market Capitalisation and Number of listed companies in each of the relevant segments.

The WFE started collecting MSS data in January 2016. The list of exchanges providing MSS data is available here: [Appendix 2: Exchanges submitting Median Simple Spread data \(as at August 2019\)](#).

<b>Product: Granular IPO level capital raised</b>
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This database contains granular, company-level information on new listings through [Initial Public Offering](#) taking place on equity markets. Only listings of plain vanilla equities (stocks) are included in this database. Listings of other financial instruments (such as ETFs, investment funds, GDRs) are excluded. Data is collected monthly. The database is comprised of the following indicators:

When possible, private placements are excluded from the investment flow statistics. If it is not possible for an exchange to exclude them, a special footnote with an explanation should be included. Listing transfers from one regulated market to another are not included in investment flows as they do not have any impact on the WFE global market capitalization.

**Indicator: Company name**

The full name of the company listing on the exchange, including their legal entity type when applicable (i.e. Ltd, SA, Spa etc.).

**Indicator: Listing date**

The day, month and year when the company is listed.

**Indicator: Listing venue**

Companies with SME boards or alternative markets should indicate whether the company is listed on the main board, or on another board (such as an SME board or an alternative market). If the company is listed on the main board, data submitters should simply indicate so ("Main board"). If the company is listed on another board, data submitters should provide the name of the board ("AIM Italia").

**Indicator: ISIN**

The ISIN associated with the newly listed instrument.

**Indicator: Foreign/Domestic**

An indicator of whether the company is [Domestic Companies](#) or [Foreign Companies](#).

**Indicator: Type of company**

To be defined.

**Indicator: Market Capitalisation on 1st trading day**

Market capitalisation is the total number of issued shares, including their several classes, multiplied by their respective prices on the first day of trading.

**Indicator: Capital raised through IPO (Newly issued shares)**

The value of money raised by the company through its [Initial Public Offering](#). The shares offered for sale must be newly issued shares. The figure is calculated by multiplying the number of shares that were placed by the offer price.

**Indicator: Capital raised through IPO (Already issued shares)**

The value of money raised by the company through its [Initial Public Offering](#). The shares offered for sale must be already issued shares. The figure is calculated by multiplying the number of shares that were placed by the offer price.

**Indicator: Capital raised through IPO (Total)**

The sum of Capital raised through IPO (Newly issued shares) and Capital raised through IPO (Already issued shares).

## Asset Class - Derivatives

**Product - Single Stock Options & Futures**

**Product - Stock Index Options & Futures**

**Product - ETF Options & Futures**

**Product - Interest Rate Options and Futures**

- **Short Term Interest Rate Options and Futures**
- **Long Term Interest Rate Options and Futures**

**Product - Currency Options and Futures**

**Product - Commodity Options and Futures**

- **Precious Metals Options and Futures**
- **Non-Precious Metals Options and Futures**
- **Energy Options and Futures**
- **Agriculture Options and Futures**
- **Index Commodity Derivatives Options and Futures**

The WFE collects key volume and value-related market data about the following derivatives products that are traded on its members' markets:

- [Stock options](#) and [Stock futures](#)
- [Stock index options](#) and [Stock index futures](#)
- [ETF options](#) [ETF futures](#)
- Interest Rate Options and Futures, broken out into [Short term interest rate options](#), [Short term interest rate futures](#), [Long term interest rate options](#) and [Long term interest rate futures](#)
- [Currency options](#) and [Currency futures](#)
- [Commodity options](#) and [Commodity futures](#) (broken out into Precious Metals Options and Futures, Non-precious Metals Options and Futures, Energy Options and Futures, Agriculture Options and Futures, Index Commodity Derivatives Options and Futures)

For each of the above products, we collect the following indicators:

### Indicator: Contracts traded

A contract is a standard unit of trading denoted by the number of shares or the amount of capital that may vary from class to class, or from product to product, as defined by an exchange. Figures are single-counted.

### Indicator: Notional value

The notional value of derivatives trading is the number of contracts traded multiplied by the contracts' underlying value. The contracts' underlying value is calculated by multiplying the market price of the underlying asset for each contract times the contract's multiplier. It is an approximate measure of the underlying value of the number of contracts traded.

#### Examples

The notional value of trading for stock options/futures on Company A and B are calculated by determining the unit of trading (contract size multiplied by stock closing price) and multiplying by the number of contracts traded.

Stock options/futures	Unit of trading		Number of contracts traded	Notional Value of Trading
	Contract size	Stock closing price		
Company A	100	28,33	1	2,833
Company B	100	17,02	117	199,134
<b>Total</b>			<b>118</b>	<b>201,967</b>

The notional value of trading in index options/futures on Index X and Y is determined by calculating the unit of trading (the index closing price multiplied by the multiplier for the relevant index) multiplied by the number of contracts traded.

Index options/futures	Unit of trading		Number of contracts traded	Notional Value of Trading
	Multiplier	Index closing price		
Index X	5	1,600	1	8,000
Index Y	2	1,350	12	32,400
<b>Total</b>			<b>13</b>	<b>40,400</b>

**Indicator: Open interest**

This is the number of derivatives contracts (futures and options) outstanding at close of trading on the last trading day of the month or the year.

**Asset Class – Bonds**

**Product - Bonds**

Bonds are fixed-income financial instruments, issued by governments, local authorities and state-owned or private organizations. They may be listed or traded in one or several exchanges and ensure predetermined levels of returns in the form of interest rate. Interest rates may remain fixed throughout the bond’s life or vary according to the bond’s terms of listing.

**Indicator: Number listed (Domestic private sector)**

**Indicator: Number listed (Domestic public sector)**

**Indicator: Number listed (Foreign)**

**Indicator: Number listed (Total)**

Definition

These indicators set out the number of bonds listed broken out by the different categories of issuers ([Domestic private bonds](#), [Domestic public bonds](#), and [Foreign bonds](#)). A single issuer may list many securities with different maturities.

Example

Bond	Number of domestic public bonds listed	Number of domestic private bonds listed	Number of foreign bonds listed	Total
Domestic public bonds	5			5
Domestic private bonds		2		2
Foreign bonds			1	1
<b>Domestic / Foreign sub-totals</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>8</b>

The total is the sum of [Domestic private bonds](#), [Domestic public bonds](#) and [Foreign bonds](#).

**Indicator: Number of new listings (Domestic private sector)**

**Indicator: Number of new listings (Domestic public sector)**

**Indicator: Number of new listings (Foreign)**

**Indicator: Number of new listings (Total)**

Definition

This indicator describes the number of new bonds listed during a given period (month or year) issued by the different categories of issuers, and split into [Domestic private bonds](#), [Domestic public bonds](#) and [Foreign bonds](#).

*Example*

Bond	Number of domestic public bonds newly listed	Number of domestic private bonds newly listed	Number of foreign bonds newly listed	Total
Domestic public bonds	2			2
Domestic private bonds		1		1
Foreign bonds			1	1
Domestic / Foreign sub-totals	2	1	1	4

The total is the sum of Domestic private, Domestic public and Foreign new listings.

- Indicator: Value traded (EOB domestic private sector)
- Indicator: Value traded (EOB domestic public sector)
- Indicator: Value traded (EOB foreign)
- Indicator: Value traded (EOB total)
- Indicator: Value traded (Negotiated deals domestic private sector)
- Indicator: Value traded (Negotiated deals domestic public sector)
- Indicator: Value traded (Negotiated deals foreign)
- Indicator: Value traded (Negotiated deals total)
- Indicator: Value traded (Total domestic private sector)
- Indicator: Value traded (Total domestic public sector)
- Indicator: Value traded (Total foreign)
- Indicator: Value traded (Total)

Definition

The WFE collects a number of indicators showing the value of bond trading. These indicators are calculated by multiplying the total number of bonds traded multiplied by their respective matching prices. The indicators include value of bond trading broken out by issuer and by means of execution. Thus the value of bond trading is split into [Domestic private bonds](#), the **Error! Reference source not found.** and for [Foreign bonds](#). The value of bond trading is broken down into [Electronic Order Book \(EOB\)](#) trades and [Negotiated Deals](#). Figures are single counted (i.e., include one side of the transaction only).

*Example*

Trade	Buyer	Seller	Platform	Bonds	Price	Electronic order book Turnover	Negotiated deals Turnover
A	Member A	Member B	Electronic Order Book	10	1	10	
B	Member A	Member B	Negotiated Deals	20	2		40
C	Member A	Non - Member	Negotiated Deals	30	3		90
D	Member B	Member A	Electronic Order Book	40	1	40	
E	Member B	Member A	Negotiated Deals	50	2		100
F	Member B	Non - Member	Negotiated Deals	60	3		180
<b>Sub-totals</b>						<b>50</b>	<b>410</b>
<b>Total</b>						<b>460</b>	

The database contains several different totals:

- EOB total is the sum of [Electronic Order Book \(EOB\)](#) Trading for [Domestic private bonds](#), [Domestic public bonds](#) and [Foreign bonds](#);
- Negotiated deals total is the sum of [Negotiated Deals](#) for [Domestic private bonds](#), [Domestic public bonds](#) and [Foreign bonds](#);
- Total Domestic Private Sector is the sum of [Electronic Order Book \(EOB\)](#) and [Negotiated Deals](#) for [Domestic private bonds](#);
- Total Domestic Public Sector is the sum of [Electronic Order Book \(EOB\)](#) and [Negotiated Deals](#) for [Domestic public bonds](#);
- Total Foreign is the sum of [Electronic Order Book \(EOB\)](#) and [Negotiated Deals](#) for [Foreign bonds](#);
- Total is total trading activity in bonds, found by either summing EOB total and Negotiated Deal total

OR Total Domestic Private Sector, Total Domestic Public Sector and Total Foreign.

**Indicator: Number of trades (EOB)**

**Indicator: Number of trades (Negotiated deals)**

**Indicator: Number of trades (Total)**

Definition

The total number of trades in bonds represents all trades which have taken place on the exchange during the period. The number is single counted (i.e., includes one side of the transaction only).

Data are broken down according to the type of facility / means used to execute the trade (see definitions in the glossary):

- Trades effected through the [Electronic Order Book \(EOB\)](#)
- [Negotiated Deals](#)

Example

Trade	Buyer	Seller	Platform	Number of trades in bonds	
				Electronic order book	Negotiated deals
A	Member A	Member B	Electronic Order Book	1	
B	Member A	Member B	Negotiated Deals		1
C	Member A	Non - Member	Negotiated Deals		1
D	Member B	Member A	Electronic Order Book	1	
E	Member B	Member A	Negotiated Deals		1
F	Member B	Non - Member	Negotiated Deals		1
<b>Sub-totals</b>				<b>2</b>	<b>4</b>
<b>Total</b>				<b>6</b>	

**Indicator: Number of bonds issuers (Domestic private sector)**

**Indicator: Number of bonds issuers (Domestic public sector)**

**Indicator: Number of bonds issuers (Foreign)**

**Indicator: Number of bonds issuers (Total)**

Definition

The total number of bond issuers represents the number of organisations which issued the fixed-income instruments listed on the exchange. These issuers are split into [Domestic private bonds](#) issuers, [Domestic public bonds](#) and [Foreign bonds](#) issuers.

- Domestic private sector bonds include corporate bonds, bonds issued by domestic banks and financial institutions;
- Domestic public sector bonds include government / state-owned organizations' bonds and bills, state-related institutions whose instruments are guaranteed by the state, and municipal bonds;
- Foreign bonds listed on the exchange are bonds issued by non-resident institutions: foreign governments, banks, financial institutions, supranational organisations (e.g. EIB, EBRD, World Bank). They also include eurobonds (bonds issued under a law of a state different from the one of the issuer and placed in a foreign country inside the euro zone).

An issuer may list bonds with different maturities, but the total number of issuers is unchanged.

*Example*

Bond issuer	Number of domestic public bond issuers	Number of domestic private bond issuers	Number of foreign bond issuers	Total
Bond issuer of domestic public company A	1			1
Bond issuer of domestic public company B	1			1
Bond issuer of domestic private C		1		1
Bond issuer of foreign company A			1	1
Bond issuer of foreign company B			1	1
Domestic / Foreign sub-totals	2	1	2	5

**Indicator: Value of listings (Domestic private sector)**

**Indicator: Value of listings (Domestic public sector)**

**Indicator: Value of listings (Foreign)**

**Indicator: Value of listings (Total)**

The total value of listed bonds is the number of bonds listed at year end multiplied by their price at year-end. This value is split into [Domestic private bonds](#), [Domestic public bonds](#) and [Foreign bonds](#). When market prices are not available, exchanges can publish a bond market value using a notional value. This would be signalled in a footnote.

*Example*

Issuer	Number of issues	Price *	Bond value
Domestic public bond issuer A	250	10	<b>2,500</b>
Domestic private bond issuer B	150	5	<b>750</b>
Foreign bond issuer C	300	2	<b>600</b>
<b>Total</b>			<b>3,850</b>

\* Prices can be market price (matching price) or notional value.

**Indicator: Bonds – Capital raised (Domestic private sector)**

**Indicator: Bonds – Capital raised (Domestic public sector)**

**Indicator: Bonds – Capital raised (Foreign)**

**Indicator: Bonds – Capital raised (Total)**

*Definition*

This indicator describes the corresponding value of newly listed bonds on an exchange and includes money raised in already listed bonds. This value is split into [Domestic private bonds](#), [Domestic public bonds](#) and [Foreign bonds](#)

*Example*

Issuer	Number of new bond issues	Issue price	Investment flows
Domestic public bond issuer A	50	10	<b>500</b>
Domestic private bond issuer B	10	5	<b>50</b>
Foreign bond issuer C	30	2	<b>60</b>
<b>Total</b>			<b>610</b>

## **Asset class – Other**

### **Product – Exchange Traded Funds**

Exchange traded funds (ETFs) are portfolio investment products that are admitted to listing or trading on a regulated exchange. An ETF provides investors with exposure to a diversified basket of shares or other financial instruments and aims to closely simulate the performance of a specified index or other benchmark. They are created and redeemed in response to demand from investors or arbitrage opportunities arising from the difference in price from the ETF and the price of the underlying asset(s) it seeks to track.”

**Indicator: Number listed**

**Indicator: Value traded (EOB)**

**Indicator: Value traded (Negotiated Deals)**

**Indicator: Number of trades (EOB)**

**Indicator: Number of trades (Negotiated Deals)**

Number listed is the number of ETFs listed or admitted to trading on an exchange at the end of the period.

Value traded is the total number of ETF shares traded, multiplied by their respective matching prices (or NAVs).

Number of trades is the actual number of ETF transactions which have occurred during the period on the relevant exchange.

Value traded and the total number of trades are presented according to the facility / means used to execute the trade, namely:

- [Electronic Order Book \(EOB\)](#)
- [Negotiated Deals](#)

Trading indicators are single counted (i.e., include one side of the transaction only).

### **Product – Investment Funds**

Investment funds include UCITS, listed unit trusts, closed-end funds, investment trusts. They are collective funds managed by an investment trust company (a company established with the purpose of investing in other companies) or a management team. UCITS, listed unit trusts, closed-end funds and investment trusts are all different forms of collective investment, depending on a country's legislation.

**Indicator: Number listed**

**Indicator: Value traded (EOB)**

**Indicator: Value traded (Negotiated Deals)**

**Indicator: Number of trades (EOB)**

**Indicator: Number of trades (Negotiated Deals)**

Number listed is the number of investment funds listed or admitted to trading on an exchange at the end of the period.

Value traded is the total number of investment funds traded, multiplied by their respective matching prices.

Number of trades is the actual number of investment fund transactions which have occurred during the period on the relevant exchange.



Value traded and the total number of trades are presented according to the facility / means used to execute the trade, namely:

- [Electronic Order Book \(EOB\)](#)
- [Negotiated Deals](#)

Trading indicators are single counted (i.e., include one side of the transaction only).

## **Product – Securitised derivatives**

### Definition

A securitized derivatives product is a tradable financial instrument designed to meet specific investor needs and to respond to different investment strategies, by incorporating special, non-standard features.

These products are in general used for capital protection, hedging against exposure to national or foreign equities, indices variations, commodity and currency prices, arbitrage strategies, directional trading, etc. Each securitized derivatives product has its own characteristics. They are generally issued by intermediaries different from the issuer of the underlying financial instruments.

Securitized derivatives products include different types of instruments such as (but not limited to) covered warrants and certificates.

Covered warrants incorporate an option to buy or sell other financial instruments; according to their features, may be distinguished between plain vanilla (underlying represented by a single product) and structured/exotic (more complex products whose underlying is represented by a basket of products, and/or incorporating combinations of call and/or put and/or exotic options). The underlying assets can be represented by equities, bonds, indices, currencies and commodities. In most cases covered warrants lead to a cash settlement, without the physical delivery of the underlying financial instruments.

Certificates track the performance of an underlying asset, often with a leverage effect (those without leverage being defined investment certificates"). They provide the investor the opportunity to spread risk with moderate capital and administration costs, thus making possible the investment in foreign or largely diversified assets.

**Indicator: Number listed**

**Indicator: Value traded (EOB)**

**Indicator: Value traded (Negotiated Deals)**

**Indicator: Number of trades (EOB)**

**Indicator: Number of trades (Negotiated Deals)**

Number listed is the number of securitised derivatives listed or admitted to trading on an exchange at the end of the period.

Value traded is the total number of securities derivatives traded, multiplied by their respective matching prices.

Number of trades is the actual number of securities derivatives transactions which have occurred during the period on the relevant exchange.

Value traded and the total number of trades are presented according to the facility / means used to execute the trade, namely:

- [Electronic Order Book \(EOB\)](#)
- [Negotiated Deals](#)

Trading indicators are single counted (i.e., include one side of the transaction only).

## Appendix 1: standard terms

### Commodity options

A commodity option is an option (right to buy or sell an underlying in the future) whose underlying reference is determined by a commodity price. Commodity derivatives can be based on a wide range of commodities (agricultural, energy, metal etc).

### Commodity futures

A commodity future is a future (obligation to buy or sell an underlying in the future) whose underlying reference is determined by a commodity price. Commodity derivatives can be based on a wide range of commodities (agricultural, energy, metal etc).

### Currency options

A currency option is an option (right to buy or sell an underlying in the future) whose underlying reference is based on a currency price.

### Currency futures

A currency future is a future (obligation to buy or sell an underlying in the future) whose underlying reference is based on a currency price.

### Domestic Companies

A company is considered domestic when it is incorporated in the same country where the exchange is located or is incorporated elsewhere but listed only on the exchange in question.

### Domestic private bonds

These include corporate bonds, bonds issued by domestic banks and financial institutions.

### Domestic public bonds

These include government / state-owned organizations' bonds and bills, state-related institutions whose instruments are guaranteed by the state, and municipal bonds.

### Electronic Order Book (EOB)

These are trades effected automatically through the exchange's electronic order book where orders placed by trading members are usually exposed to all market users and automatically matched according to precise rules set up by the exchange, generally on a price/time priority basis.

### ETF options

An ETF option is an option (right to buy or sell an underlying in the future) whose underlying reference is determined by an ETF price. As ETFs trades like stocks, options on these products are operationally similar to options on stocks.

### ETF futures

An ETF future (obligation to buy or sell an underlying in the future) whose underlying reference is determined by an ETF price. As ETFs trades like stocks, futures on these products are operationally similar to futures on stocks.

### Foreign bonds

Bonds issued by non-resident institutions: foreign governments, banks, financial institutions, supranational organisations (e.g. EIB, EBRD, World Bank). They also include eurobonds (bonds issued under a law of a state different from the one of the issuer and placed in a foreign country inside the euro zone).

## Foreign Companies

A company is considered foreign when it is incorporated somewhere other than where the exchange is located and is listed on another exchange in addition to the reporting exchange.

## Initial Public Offering

An Initial Public Offering is a placement of stocks by an unlisted company aimed at creating the float for the admission to listing on an exchange. The prospectus is mandatory and must be approved by the regulator. During the offer, both existing shareholders and the company itself may place – through an offer usually run by a pool of intermediaries and managed by a global coordinator - already issued or newly issued shares. Through this process, a private company transforms into a public company.

Rules:

- 1 Company must be listing for the first time
- 2 Prospectus must be approved by a regulatory authority
- 3 Shares must be offered to the public

## Long term interest rate options

A long term interest rate option is an option (right to buy or sell an underlying in the future) whose underlying reference is determined by the level of a specific long term interest rate. A long term interest rate corresponds to an original term to maturity greater than 12 months (treasury bonds, corporate bonds, Eurobonds etc).

## Long term interest rate futures

A long term interest rate future is a future (obligation to buy or sell an underlying in the future) whose underlying reference is determined by the level of a specific long term interest rate. A long term interest rate corresponds to an original term to maturity greater than 12 months (treasury bonds, corporate bonds, Eurobonds etc).

## Negotiated Deals

These are trades not concluded through the EOB, confirmed through a system managed (directly or indirectly) by the exchange, where both seller and buyer agree on the transaction (price and quantity). This system checks automatically if the transaction is compliant with the exchange rules, including most often consistency with EOB price.

## Reported Trades

These are trades not concluded through the EOB, reported through a Trade Reporting Facility (TRF) when only one counterparty provides information on the trade and offers dissemination services at the request of the reporting trader. The other counterparty may use this facility if reporting is mandatory.

## Short term interest rate options

A short term interest rate option is an option (right to buy or sell an underlying in the future) whose underlying reference is determined by the level of a specific short term interest rate. A short term interest rate corresponds to an original term to maturity equal to or lower than 12 months (treasury bills, deposits etc).

## Short term interest rate futures

A short term interest rate future is a future (obligation to buy or sell an underlying in the future) whose underlying reference is determined by the level of a specific short term interest rate. A short term interest rate corresponds to an original term to maturity equal to or lower than 12 months (treasury bills, deposits etc).

## Stock options

A stock option is a standardized tradable contract that gives the owner the right to buy or sell a particular stock at a specified date in the future at a pre-determined price.

## Stock futures

A stock future is a standardized tradable contract that gives the owner the obligation to buy or sell a particular stock at a specified date in the future at a pre-determined price.

## Stock index options

A stock index option is an option (right to buy or sell an underlying in the future) whose underlying reference is determined by the price of a specific stock index.

## Stock index futures

A stock index future is a future (obligation to buy or sell an underlying in the future) whose underlying reference is determined by the price of a specific stock index.

## Appendix 2: Exchanges submitting Median Simple Spread data (as at August 2019)

Amman Stock Exchange  
Athens Stock Exchange  
Australian Securities Exchange  
B3  
Bahrain Bourse  
BME Spanish Exchanges  
Bolsa de Valores de Colombia  
Bolsa Mexicana de Valores  
Bourse de Casablanca  
BSE Limited  
Bursa Malaysia  
Colombo Stock Exchange  
Cyprus Stock Exchange  
Euronext  
Hochiminh Stock Exchange  
Indonesia Stock Exchange  
Johannesburg Stock Exchange  
Kazakhstan Stock Exchange  
Korea Exchange  
Luxembourg Stock Exchange  
Moscow Exchange  
Muscat Securities Market  
Nasdaq - US  
Nasdaq Nordic and Baltic Exchanges  
National Stock Exchange of India  
Nigerian Stock Exchange  
NZX Limited  
Oslo Bors  
Palestine Exchange  
Qatar Stock Exchange  
Shenzhen Stock Exchange  
Six Swiss Exchange  
Stock Exchange of Mauritius  
Taipei Exchange  
Tel Aviv Stock Exchange  
The Egyptian Exchange  
The Philippine Stock Exchange  
The Stock Exchange of Thailand

## Appendix 3: Note on exchange groupings

*(as at July 2019)*

The following exchange groups report as a single entity, although for some indicators (especially blue chip and broad market indices) the WFE reports data broken down at a venue level.

**Australian Securities Exchange** (ASX Limited) reports all statistics as a unified entity. Prior to December 2015, they attributed derivatives statistics to separate entities, namely:

- ASX Derivatives Trading: Single Stock Options and Futures, Stock Index Options and Futures, ETF Options
- ASX SFE Derivatives Trading: Stock Index Options and Futures, Interest Rate Options and Futures, Commodity Options and Futures

**Bolsas y Mercados Españoles, BME (Spanish Exchanges)** is the holding company of:

- BME Barcelona
- BME Bilbao
- BME Madrid
- BME Valencia
- the [MEFF](#) exchange

BME exchanges reported as separate entities till December 2008. Currently BME statistics are consolidated under BME – Spanish Exchanges. Broad market indices are still reported at an entity level.

**Bursa Malaysia** is the holding company of:

- Bursa Malaysia (equity market)
- Bursa Malaysia Derivatives (derivatives markets)

Each of them reports as a separate entity.

**Cboe Global Markets** is the holding company of:

Options markets:

- The Chicago Board Options Exchange (Cboe)
- Cboe C2 Options Exchange
- Cboe BZX Options Exchange
- Cboe EDGX Options Exchange

US equity markets:

- BZX Exchange
- BYX Exchange
- EDGA Exchange
- EDGX Exchange

European equity markets:

- Cboe Europe

Global FX markets:

- Cboe FX

Statistics of Cboe are presented as follows:

- Cboe Global Markets: including figures from the four options markets listed above as well as the US equities markets..
- Cboe Europe: reporting as a stand-alone unit
- Cboe Futures Exchange: reporting as a stand-alone unit

Cboe Global Markets acquired BATS Global Markets in September 2016. Cboe statistics started incorporating ex-BATS figures after February 2018.

**CME Group** is the holding company of:

- CME
- CBOT
- NYMEX
- COMEX

CME Group statistics are consolidated under the name CME Group.

**Euronext** is the holding company of:

- Euronext Amsterdam
- Euronext Brussels
- Euronext Dublin
- Euronext Lisbon
- Euronext London
- Euronext Paris

Euronext Amsterdam, Brussels and Paris reported as separate entities till December 2008. Euronext Lisbon reported as a separate entity till December 2015. The Irish Stock Exchange was acquired by Euronext in March 2018, and subsequently became Euronext Dublin. From January 2019, Euronext statistics include Euronext Dublin figures. Euronext Lisbon reports Blue Chip and Broad Market statistics as a separate entity.

**Hong Kong Exchanges and Clearing** is the holding company of:

- The Stock Exchange of Hong Kong Limited (SEHK)
- Hong Kong Futures Exchange Limited (HKFE)
- London Metal Exchange

All statistics are reported under Hong Kong Exchanges and Clearing, apart from Commodities Options and Futures, which are reported by the London Metal Exchange.

**Intercontinental Exchange** is the holding company of:

- The New York Stock Exchange (NYSE)
- ICE Futures US
- ICE Futures Canada
- ICE Futures Europe

Each of them reports as a separate entity.

**Japan Exchange Group** is the holding company of:

- Tokyo Stock Exchange
- Osaka Stock Exchange

Tokyo Stock Exchange and Osaka Stock Exchange reported as separate entities till December 2013.

**LSE Group** is the holding company of:

- London Stock Exchange
- Borsa Italiana

London Stock Exchange and Borsa Italiana reported as separate entities till August 2010. Broad market and Blue-Chip indices are still reported at an entity level.

**Nasdaq Inc.** is the holding company of:

- Nasdaq (US)
- The International Securities Exchange (ISE)
- Nasdaq Copenhagen (Copenhagen Stock Exchange)
- Nasdaq Stockholm (Stockholm Stock Exchange)
- Nasdaq Helsinki (Helsinki Stock Exchange)
- Nasdaq Iceland (Iceland Stock Exchange)
- Nasdaq Baltic: Tallinn Stock Exchange, Riga Stock Exchange and Vilnius Stock Exchange
- Nasdaq OMX Armenia (Armenian Stock Exchange)

Statistics of Nasdaq are presented in two different groups:

- Nasdaq (US) for USA statistics (excluding ISE)
- Nasdaq Nordic Exchange for European statistics. This includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga and Vilnius stock exchanges.

Nasdaq Copenhagen, Nasdaq Stockholm and Nasdaq Helsinki reported as separate entities till December 2004. Nasdaq Stockholm and Nasdaq Helsinki report Blue Chip and Broad Market statistics as a separate entities.

**The Stock Exchange of Thailand** is the holding company of:

- The Stock Exchange of Thailand (equity market)
- The Thailand Futures Exchange (derivatives markets)

Each of them reports as a separate entity.

**TMX Group** is the holding company of:

- Toronto Stock Exchange (equity market)
- TSX Venture Exchange (equity market)
- Montreal Exchange (derivatives market)
- Boston Options Exchange (derivatives market)

Equity statistics for Toronto Stock Exchange and TSX Venture Exchange are reported under “TMX Group”. Montreal Exchange and Boston Options Exchange report as separate entities (though the Boston Options Exchange only provides annual derivatives data).