

WORLD FEDERATION OF EXCHANGES PUBLISHES 2016 MARKET HIGHLIGHTS

10 February 2017: The World Federation of Exchanges (WFE) today published its 2016 Market Highlights.

KEY HIGHLIGHTS

Perhaps highlighting the somewhat exceptional nature of 2015, markets were more subdued in 2016, with most regions showing only modest increases on 2015 figures across the major primary and secondary market indicators, coupled with a number of more significant decreases:

- **Global market capitalisation** was up 4.4%.
- **Value of share trading and the number of trades** declined by 26.9% and 15.5%.
- The **number of newly listed companies and investment flows** through IPOs were down 35.8% and 36.8% respectively.
- **Exchange Traded Derivatives (ETD)** volumes ended the year 2% down on 2015, driven by the drop in volumes of equity derivatives and stock index derivatives traded.

According to the WFE's full-year statistics, the key trends of 2016 were as follows:

- **Global market capitalisation** was up 4.4% on 2015, driven by the 10.8% and 0.9% rise in the Americas and EMEA regions respectively. Asia-Pacific ended the year down 0.5% versus the end of 2015. Global market capitalisation in H2 2016 increased relative to H1 2016 by 5.7% overall.
- Globally the **value of share trading and the number of trades** declined by 26.9% and 15.5% on 2015, driven primarily by the 47.2% and 26.1% drop in these figures in the Asia-Pacific region.
 - The fall in value and volume traded most likely reflects the influence of key events in the Asia-Pacific region, such as the sharp sell-off and trading halt on Chinese exchanges in early January 2016; concerns over the likelihood of an interest rate increase in the US; uncertainty over the future of trade policy with the Americas; and other political and economic events across the Asia-Pacific region.
 - In the Americas and EMEA regions, the number of trades increased by 5.2% and 4.7% respectively but the value of share trading was down 4.6% and 15.3% on 2015. Overall in H2 2016, the value traded and volume traded were down 23.3% and 7.7% on H1 2016, thus driving the global slowdown in turnover and trades.
- The **number of newly listed companies, investment flows** through IPOs and non-IPO investment flows were all down (35.8%, 36.8% and 24.7% respectively) on 2015.
 - All regions experienced a **decline in investment flows**, but this was particularly pronounced in the Americas (down 46.2%). The main driver of this trend was the US, in an election year and with uncertainty over regime change and consequential shifts in policy.
 - The EMEA region experienced the largest percentage drop in **non-IPO investment flows**. In Europe, which accounted for 93.4% of all investment flows in the region, the 18% drop in investment flows took place against a backdrop of sluggish economic momentum; concerns over the health of the banking system; and uncertainty in the region post Brexit.
- **Exchange Traded Derivatives (ETD)** volumes (as represented by number of contracts traded) ended the year 2% down on 2015, driven by a drop in volumes of equity derivatives and stock index derivatives. The full year saw a reversal of the trend observed in H1 2016, when the growth in volumes of commodity and currency derivatives saw ETD volumes up by 1.4% on H1 2015.

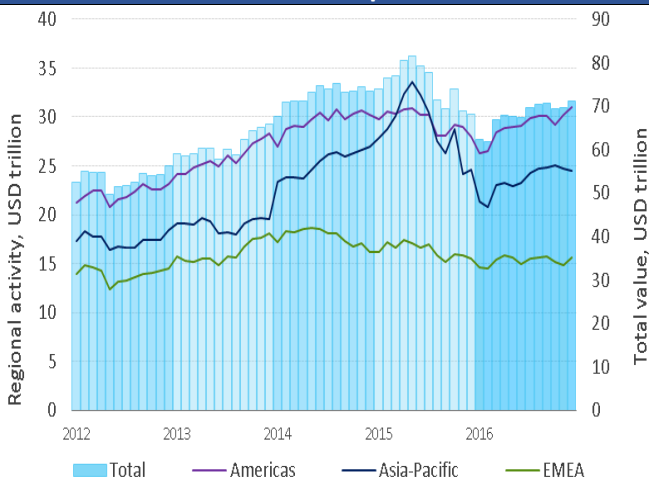
- Volumes traded in **single stock options** and **futures** dropped by 9.7% and 14.5% respectively. The Americas, where 79.4% of options contracts are traded, and the EMEA region, where 53% of single stock futures are traded, experienced a decline in volumes of 10.5% and 15.5% respectively.
- **Equity index** based **options** and **futures** saw volumes decline by 16.6% and 15.7% respectively. Divergent trends were witnessed across regions. The Asia-Pacific region experienced a sharp drop in volumes traded in index options and futures (down 43% and 49.6%) respectively, whereas the EMEA and Americas regions saw a pickup in number of contracts traded in these products versus 2015.
- Volume of **commodity options** and **futures** traded saw a pickup in all regions with a worldwide increase of 10.5% and 28.7% respectively. The Americas, which account for about 80% of commodity options contracts traded, and the Asia-Pacific region, where 68% of commodity futures are traded, were the drivers of this change, with growth rates of 9.4% and 26.7% respectively. Volumes were driven by the pickup in energy assets such as natural gas and oil, metals including silver and iron ore, and agricultural commodities like soybean and sugar.
- For **currency futures**, the volume traded in 2016 was 4.7% higher than in 2015. However, this includes a 5.6% decrease in the number of contracts traded in the EMEA region, where over 46% of the world's currency futures are traded.

Nandini Sukumar, CEO, WFE said: “The most startling statistics for 2016 - the sharp downward trends around IPOs and investment flows - reflect global uncertainty triggered by events such as Brexit and the US election.”

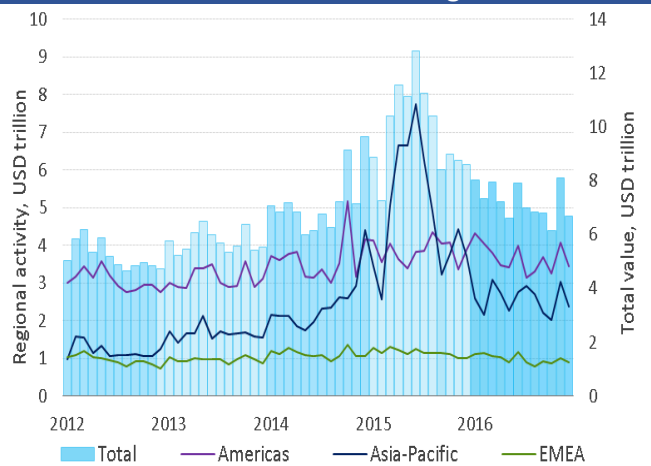
“It is also interesting to note the reversal in the fortunes of ETDs,” added **Siobhan Cleary, Head of Research & Public Policy, WFE**. “After a bumper start in the first half of 2016, ETDs finished the year down 2%, driven primarily by lower volumes of equity and stock index derivatives.”

Cash Equity Market

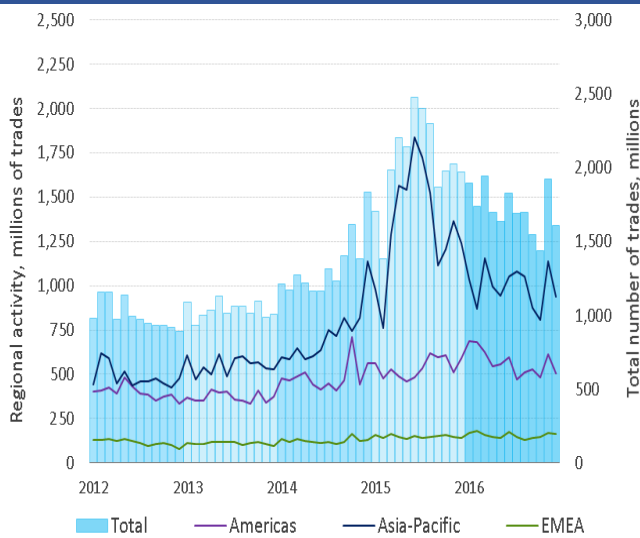
Domestic Market Capitalization¹



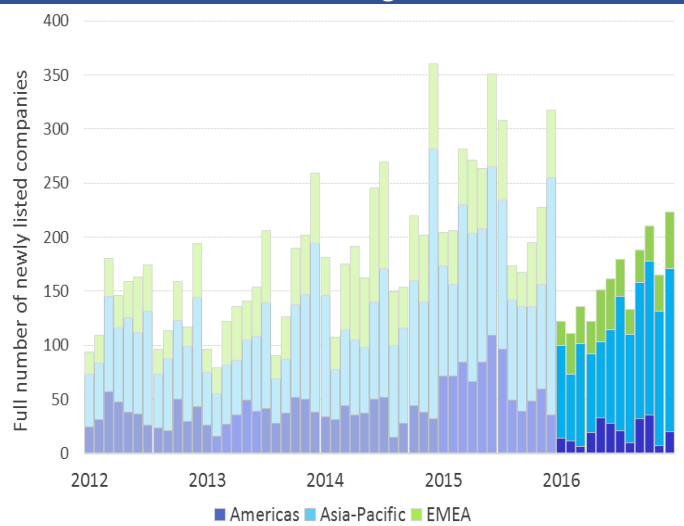
Value of Share Trading



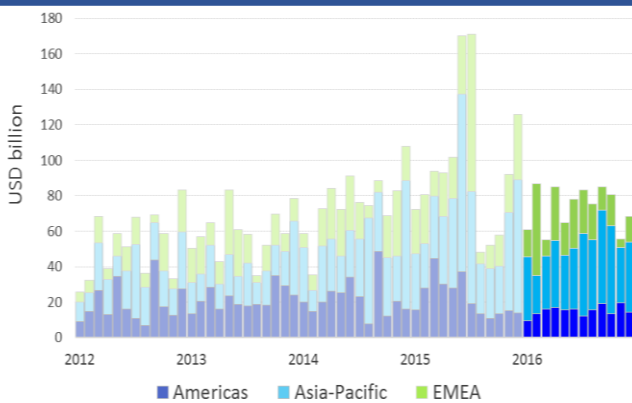
Number of trades



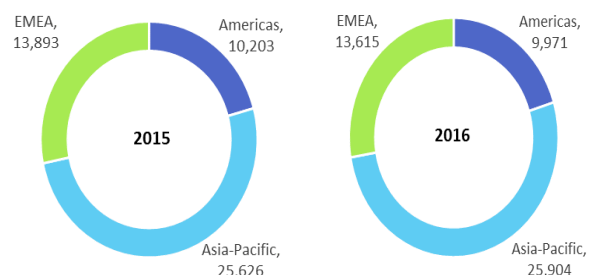
New listings



Investment flows



Number of listed companies



¹ Bats Chi-X Europe is included in the data for Value of share trading and Number of trades, but not in the data for Domestic Market capitalisation.

Cash Equity Market

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2016	% change 2016/2015
Domestic Market Capitalization <i>(USD million)</i>	66 892 855	67 322 043	70 603 389	71 046 297	71 046 297	4.4%
Americas	28 427 414	29 143 222	30 066 074	30 963 821	30 963 821	10.8%
Asia-Pacific	23 073 136	23 237 355	24 831 702	24 441 904	24 441 904	-0.5%
EMEA	15 392 306	14 941 466	15 705 613	15 640 573	15 640 573	0.9%
Value of Share Trading² <i>(USD million)</i>	23 296 291	21 693 270	13 591 218	20 915 950	86 502 100	-26.9%
Americas	12 163 138	10 889 537	10 149 165	10 748 909	43 950 749	-4.6%
Asia-Pacific	7 819 594	7 731 447	7 847 979	7 407 641	30 806 660	-47.2%
EMEA	3 313 559	3 072 286	2 599 446	2 759 400	11 744 691	-15.3%
Number of trades³ <i>(millions of trades)</i>	5 568 353	5 156 639	4 933 968	4 960 749	20 619 709	-15.5%
Americas	1 993 953	1 700 021	1 509 245	1 599 404	6 802 622	5.2%
Asia-Pacific	3 062 087	2 990 134	3 004 609	2 881 533	11 938 363	-26.1%
EMEA	512 313	466 484	420 114	479 812	1 878 724	4.7%
Number of listed companies <i>(full number)</i>	49 130	49 164	49 031	48 976	48 976	-0.4%
Americas	10 107	10 067	9 993	9 971	9 971	-2.3%
Asia-Pacific	25 227	25 386	25 390	25 390	25 390	1.2%
EMEA	13 796	13 711	13 648	13 615	13 615	-2.0%

Source: WFE

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2016	% change 2016/2015
Number of newly listed comp. <i>(full number)</i>	393	447	512	611	1963	-35.8%
IPOs	230	302	321	426	1279	-19.6%
Other	163	145	191	185	684	-53.4%
Investment flows, IPOs <i>(USD million)</i>	13 134	27 108	36 344	50 942	127 528	-36.8%
Americas	1 845	5 358	5 912	7 341	20 456	-46.2%
Asia-Pacific	7 756	10 222	25 666	29 134	72 778	-28.6%
EMEA	3 533	11 527	4 766	14 468	34 294	-44.5%
Investment flows, other co's <i>(USD million)</i>	191 016	196 976	204 966	152 977	745 934	-24.7%
Americas	38 183	43 929	41 101	40 352	163 565	-29.7%
Asia-Pacific	79 750	93 607	111 915	89 834	375 106	-18.5%
EMEA	73 083	59 440	51 950	22 790	207 264	-30.2%

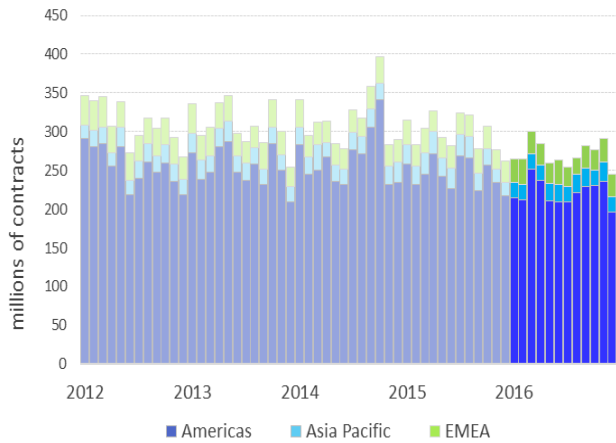
Source: WFE

² Trades registered through Electronic Order Book

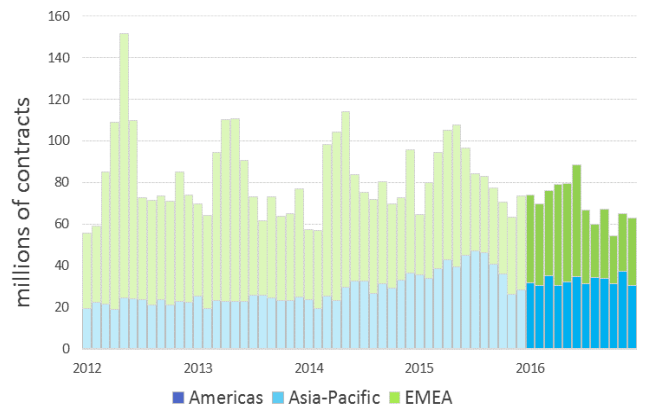
³ Trades registered through Electronic Order Book

Derivatives Markets

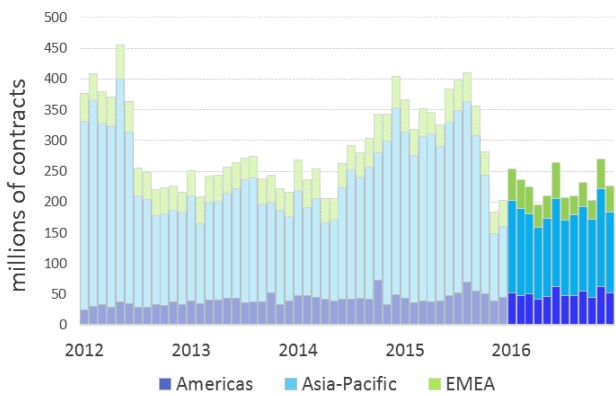
Stock Options



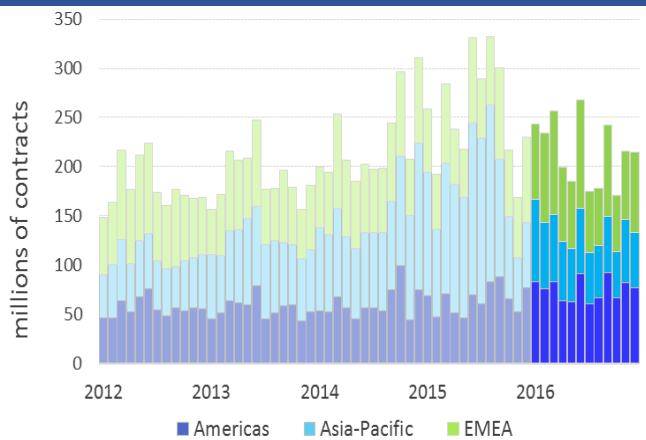
Single Stock Futures



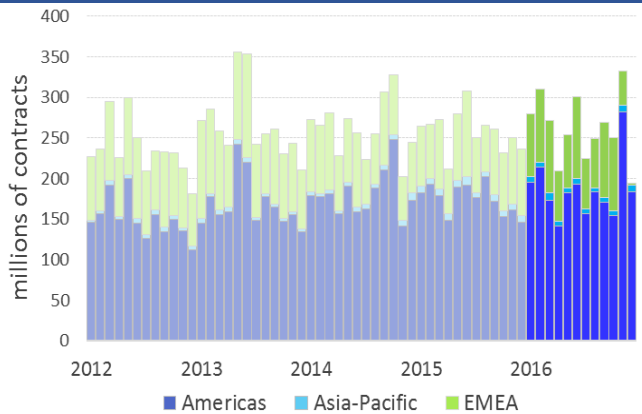
Stock Index Options



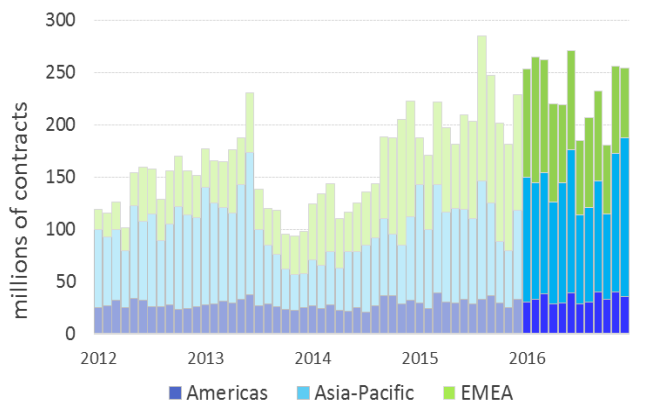
Stock Index futures



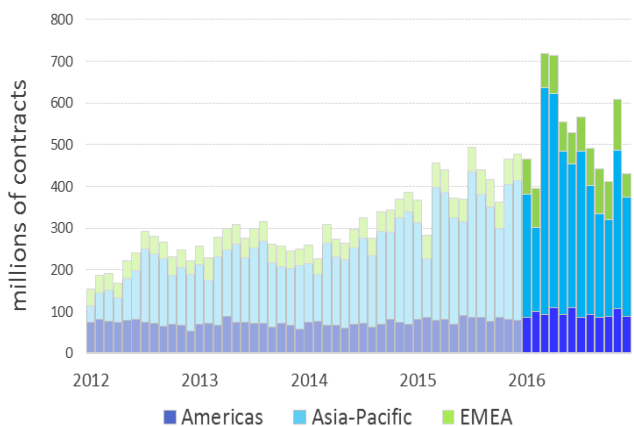
Interest Rates Derivatives



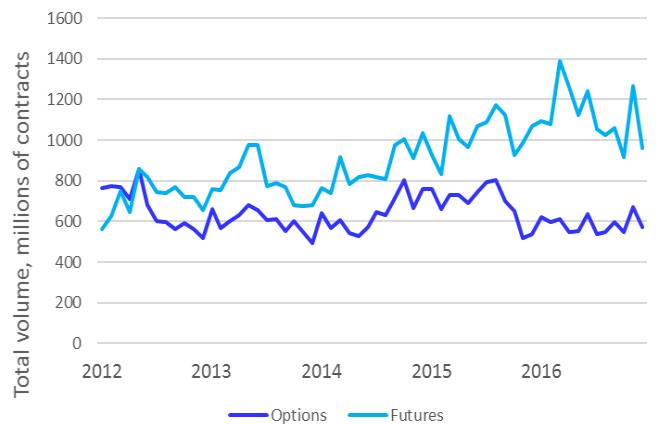
Currency Derivatives



Commodity Derivatives



All Derivatives



Derivatives Market (total number of contracts traded)

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2016	% change 2016/2015
Stock Options	830 200 897	807 882 925	801 549 354	811 842 860	3 251 476 036	-9.79%
Americas	678 874 299	657 652 042	659 147 106	662 251 823	2 657 925 270	-10.59%
Asia-Pacific	58 800 565	63 763 249	68 755 968	65 569 655	256 889 437	-10.66%
EMEA	92 526 033	86 467 634	73 646 280	84 021 382	336 661 329	-2.23%
Single Stock Futures	219 885 260	247 170 358	193 724 951	182 773 341	843 553 910	-14.55%
Americas	204181	143407	154058	166553	668199	115.12%
Asia-Pacific	97560767	97571859	99317846	99078426	393528898	-16.88%
EMEA	122176864	149455092	94253047	83528362	449413365	-15.77%
Stock Index Options	714 370 684	669 105 771	1 190 300 478	698 658 730	3 272 435 663	-16.57%
Americas	151 100 317	151 695 886	150 022 023	158 681 345	611 499 571	10.13%
Asia-Pacific	421 726 309	385 415 343	391 892 195	419 219 155	1 618 253 002	-43.11%
EMEA	141 544 058	131 994 542	648 386 261	120 758 230	1 042 683 091	99.51%
Stock Index Futures	733 154 256	652 175 259	594 717 766	600 261 517	2 580 308 798	-15.68%
Americas	241 868 433	217 932 038	219 221 228	225 240 725	904 262 424	16.14%
Asia-Pacific	219 107 259	180 432 315	162 613 439	167 880 797	730 033 810	-49.57%
EMEA	272 178 564	253 810 906	212 883 099	207 139 995	946 012 564	13.41%
Interest Rate Options	170 256 783	131 582 409	125 248 496	143 755 489	570 843 177	-0.25%
Americas	129 057 558	102 687 915	99 819 208	124 322 154	455 886 835	6.84%
Asia-Pacific	235 331	247 978	281 760	193 403	958 472	-16.12%
EMEA	40 963 894	28 646 516	25 147 528	19 239 932	113 997 870	-21.08%
Interest Rates Futures	691 456 441	633 035 958	617 791 227	633 507 411	2 575 791 037	1.87%
Americas	453 523 080	414 641 339	411 688 525	496 018 829	1 775 871 773	6.30%
Asia-Pacific	21 423 864	18 660 007	17 138 459	21 854 022	79 076 352	-14.02%
EMEA	216 509 497	199 734 612	188 964 243	115 634 560	720 842 912	-5.89%
Commodity Options	53 666 720	58 815 201	50 904 351	50 599 865	213 986 137	10.47%
Americas	41 910 106	47 750 900	40 620 435	39 637 309	169 918 750	9.39%
Asia-Pacific	1 131 421	874 151	612 517	756 956	3 375 045	125.44%
EMEA	10 625 193	10 190 150	9 671 399	10 205 600	40 692 342	10.33%
Commodity Futures	1 526 742 989	1 739 579 244	1 448 773 559	1 403 059 684	6 118 155 476	28.73%
Americas	236 898 583	265 652 967	226 794 922	246 603 691	975 950 163	17.88%
Asia-Pacific	1 042 277 388	1 247 005 450	952 267 851	894 859 436	4 136 410 125	26.72%
EMEA	247 567 018	226 920 827	269 710 786	261 596 557	1 005 795 188	52.23%
Currency Options	153 500 465	161 063 705	150 162 825	182 085 116	646 812 111	43.12%
Americas	7 335 493	6 565 637	5 510 917	6 180 919	25 592 966	-9.53%
Asia-Pacific	130 827 199	139 715 690	129 196 898	159 429 472	559 169 259	50.44%
EMEA	15 337 773	14 782 378	15 455 010	16 474 725	62 049 886	19.45%
Currency Futures	627 586 645	549 072 044	473 881 061	509 160 749	2 159 700 499	4.67%
Americas	93 120 430	89 724 495	93 252 200	102 401 493	378 498 618	11.20%
Asia-Pacific	216 925 824	210 117 976	152 588 966	206 594 060	786 226 826	17.51%
EMEA	317 540 391	249 229 573	228 039 895	200 165 196	994 975 055	-5.58%

Source: WFE

Other products

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2016	% change 2016/2015
ETFs <i>(Full number of listed securities)</i>	9 574	9 766	9 838	9 904	9 904	5.7%
Americas	2 279	2 725	2 319	2 335	2 335	10.1%
Asia-Pacific	909	1 106	928	2 940	940	9.5%
EMEA	4 932	5 935	5 066	5 138	5 138	8.5%
ETFs <i>(Value traded, USD millions)</i>	4 462 791	3 866 689	3 586 323	3 918 055	15 833 857	3.0%
Americas	3 855 749	3 325 932	3 113 807	3 386 495	13 681 982	1.8%
Asia-Pacific	344 815	292 845	246 712	276 145	1 160 517	-11.2%
EMEA	262 228	247 912	225 804	255 415	991 358	-4.3%
Securitized derivatives <i>(Full number of listed securities)</i>	1 739 696	1 733 974	1 714 802	1 751 613	1 751 613	10.0%
Americas	261	284	326	339	339	48.0%
Asia-Pacific	22 129	21 432	22 925	22 930	22 930	-8.5%
EMEA	1 717 306	1 712 258	1 691 551	1 728 344	1 728 344	10.3%
Securitized derivatives <i>(Value traded, USD millions)</i>	220 921	179 920	173 872	148 542	723 256	-27.9%
Americas	36	46	50	32	164	-32.8%
Asia-Pacific	180 582	145 627	142 608	118 693	587 511	-27.2%
EMEA	40 304	34 247	31 214	29 816	135 581	-31.9%
Investment funds <i>(Full number of listed securities)</i>	23 042	23 070	23 867	23 997	23 997	2.8%
Americas	831	838	856	857	857	4.8%
Asia-Pacific	1 572	1 600	2 120	2 532	2 532	76.3%
EMEA	20 639	20 632	20 891	20 608	20 608	-2.3%
Investment funds <i>(Value traded, USD millions)</i>	84 910	99 675	99 274	90 586	374 446	38.7%
Americas	43 242	55 186	59 512	50 125	208 066	17.4%
Asia-Pacific	19 300	18 474	21 423	15 051	74 250	27.4%
EMEA	22 367	26 014	18 338	25 411	92 131	31.1%
Bonds ⁴ <i>(Full number of listed securities)</i>	147 385	149 591	149 275	152 047	152 047	7.3%
Americas	6 188	6 052	6 019	5 901	5 901	-6.6%
Asia-Pacific	35 873	37 362	38 817	40 404	40 404	15.8%
EMEA	105 324	106 177	104 439	105 742	105 742	5.3%
Bonds ⁵ <i>(Value traded, USD millions)</i>	3 839 216	4 039 352	4 459 798	3 635 453	15 973 819	5.6%
Americas	6 1932	75 848	71 848	71 524	281 154	5.0%
Asia-Pacific	698 979	762 736	1 442 214	755 280	3 659 209	51.9%
EMEA	3 078 305	3 204 624	2 945 735	2 808 649	12 037 314	-3.4%

Source: WFE

⁴ Excluding Deutsche Börse

⁵ Excluding Deutsche Börse

Summary of the Methodologies adopted for this report

All data contained in the following equity market tables include the Main/Official market and the Alternative /SMEs markets supervised and regulated by the Exchange.

Domestic Market Capitalization

The market capitalization figures include:

- shares of listed domestic companies;
- shares of foreign companies which are exclusively listed of an exchange, i.e. the foreign company is not listed on any other exchange ;
- common and preferred shares of domestic companies;
- shares without voting rights.

The market capitalization figures exclude:

- collective investment funds;
- rights, warrants, ETFs, convertible instruments;
- options, futures;
- foreign listed shares other than exclusively listed ones;
- companies whose only business goal is to hold shares of other listed companies, such as holding companies and investment companies, and regardless of their legal status;
- companies admitted to trading (companies admitted to trading are companies whose shares are traded at the exchange but not listed at the exchange).

Australian Securities Exchange: including investment funds.

BME Spanish Exchanges: including investment companies listed (open-end investment companies) that differ from investment funds included in table 1.3 because of their legal status and that cannot be distinguished from other listed companies.

Bolsa de Valores de Lima: Includes 26 foreign companies with shares negotiated under a special modality.

Borsa Istanbul market capitalization/listed companies figures include investment companies and holdings.

Deutsche Börse: excluding the market segment "Freiverkehr" (unofficial regulated market).

Euronext: includes Belgium, England, France, Netherlands and Portugal.

Johannesburg Stock Exchange: figures include the market capitalization of all listed companies, but

exclude listed warrants, convertibles and investment funds.

Korea Exchange: including Kosdaq market data.

Nasdaq Nordic Exchanges: includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga and Vilnius Stock Exchanges.

NSE India: including "Emerge" market data.

Singapore Exchange: market capitalization includes domestic listings and a substantial number of foreign listings, defined as companies whose principal place of business is outside of Singapore. Inactive secondary foreign listings are excluded.

Stock Exchange of Mauritius: from Aug. 2006, data includes Development & Enterprise Market.

TMX Group: includes companies listed on TSX Venture.

Value of Bond trading

Due to different reporting rules & calculation methods, turnover figures are not entirely comparable.

The sale & purchase of a share are counted as one transaction.

BM&FBOVESPA: Since January 2007, FIDC issues (Receivable Investment Funds) are included.

Disclaimer:

While the World Federation of Exchanges (WFE) made every effort to check that the data are accurate and complete - it does not accept liability for any errors or omissions. WFE shall not be liable for any claims or losses of any nature arising directly or indirectly from use of the data. Please note that some technical footnotes available in the monthly statistics published by WFE are not available here in the raw data uploaded with the query tool.

In order to explain some breaks in the time series or other statistical issues - the user will probably have to consult those footnotes in the monthly tables published by the WFE.

Statistics definitions are also publicly available on [WFE website](#).

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Exchanges that provided data for this report

Athens Stock Exchange (ATHEX)
Australian Securities Exchange
BATS Global Markets
Bermuda Stock Exchange
BM&FBOVESPA S.A.
BME Spanish Exchanges
Bolsa de Comercio de Buenos Aires
Bolsa de Comercio de Santiago
Bolsa de Valores de Colombia
Bolsa de Valores de Lima
Bolsa Mexicana de Valores
Borsa Istanbul
Bourse de Casablanca
BSE India Limited
Bucharest Stock Exchange
Budapest Stock Exchange
Bursa Malaysia
CBOE Holdings
China Financial Futures Exchange
CME Group
Colombo Stock Exchange
Cyprus Stock Exchange
Dalian Commodity Exchange
Deutsche Börse
Dubai Gold and Commodities Exchange
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Hong Kong Exchanges and Clearing
ICE Futures USA
ICE Futures Canada
Indonesia Stock Exchange
Intercontinental Exchange, Inc.
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London Metal Exchange
Luxembourg Stock Exchange
Malta Stock Exchange
MIAX Options
Moscow Exchange
Muscat Securities Market
Nasdaq
National Stock Exchange of India Limited
NYSE
NZX Limited
Oslo Børs
Saudi Stock Exchange (Tadawul)
Shanghai Futures Exchange
Shanghai Stock Exchange
Shenzhen Stock Exchange
Singapore Exchange
SIX Swiss Exchange
Stock Exchange of Mauritius
Taipei Exchange
Taiwan Futures Exchange (TAIFEX)
Taiwan Stock Exchange
Tehran Stock Exchange
Tel-Aviv Stock Exchange
The Egyptian Exchange
The Philippine Stock Exchange
The Stock Exchange of Thailand
TMX Group
Warsaw Stock Exchange
Wiener Borse
Zhengzhou Commodity Exchange