

2012 WFE Market Highlights

2012 was a very challenging year for exchanges: the volumes of all products traded on WFE members were significantly down: -22.5% for equity transactions (USD 49 tn) and -20% for derivatives (14.9bn of equity and interest rates contracts traded). Cash markets continued to suffer from the relative disaffection for equities; derivatives markets were affected from the continued low interest rate environment and the significant decrease of volatility, both factors reducing hedging needs.

The other products traded by WFE exchanges also experienced very sharp declines of turnover value:

- ETFs : -31.6% (USD 7.3 tn)
- Securitized derivatives: -43.3% (USD 652 bn)
- Bonds: -20% (USD 26.1 tn)

On a more positive note, the only indicator growing was the market capitalization. After the sharp decline observed in 2011 during the summer, it recovered in 2012 with a 15% growth rate, getting back to its end-of 2010 level. Number of listed companies remain stable at 46 332 (-0.8%).

Equity Markets

Market capitalization **USD 55 tn**  **+15.1%**

In 2012, the global market capitalization recovered with a 15.1% growth rate to USD 54 570 mn. This growth rate was nevertheless not sufficient to reach again the levels observed during the first months of 2011.

The best performance in 2012 was observed in the Americas (+17.2%) followed by Asia-Pacific (+15.4%) and EAME (+11.6%).

In the Americas, the growth was mainly driven by the US exchanges that increased 19% while Canada increased slightly less (8%) and contrasted trends were observed in Latin American countries.

In Asia-Pacific, the highest growth rates were observed in Thailand (+45%), Philippine (+39%), Singapore (+28%), Hong Kong (+25%) and India (+25%) and relatively lower growth rates occurred in mainland China and Japan (respectively +8% and +5%).

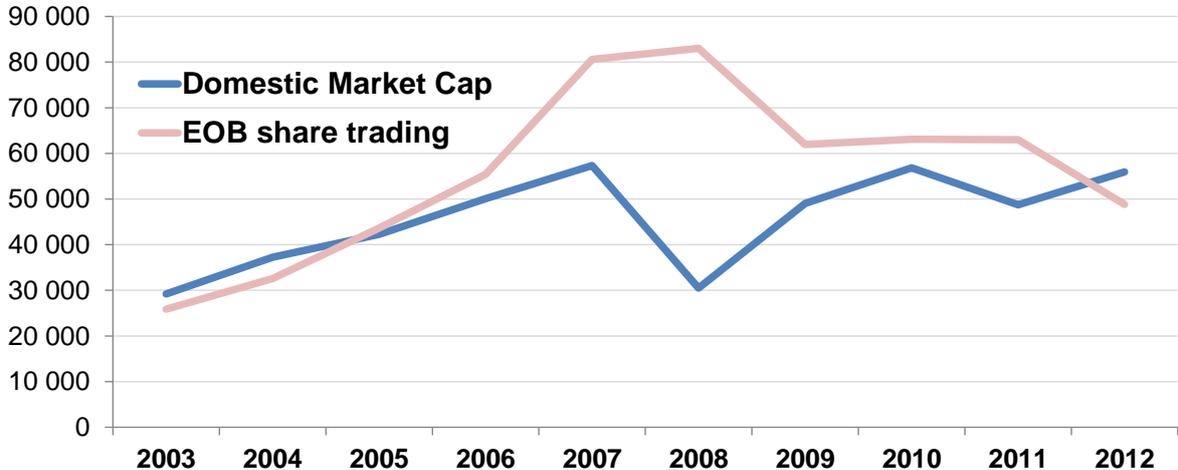
In EAME, Africa Middle East region experienced a 20% growth rate, eurozone increased 14% while the LSEG in the UK rose 4%.

Number of listings **46 332** ↘ **-0.8%**

In 2012 the total number of listed companies on WFE exchanges was steady (-0.3%): -0.4% in Americas, +0.9% in Asia-Pacific and -2.2% in EAME.

Value of share trading **USD 49 tn** ↘ **-22.5%**

Despite the good performance of market capitalization in 2012, Electronic Order Book (EOB) turnover value declined by 22.5%. All the regions were affected by this trading volumes drop: EAME (-24.1%), Americas (-23.2%) and Asia Pacific (-20%).



The sharp increase in EOB share trading value in 2007 is partially due to a methodological change by the US stock exchanges

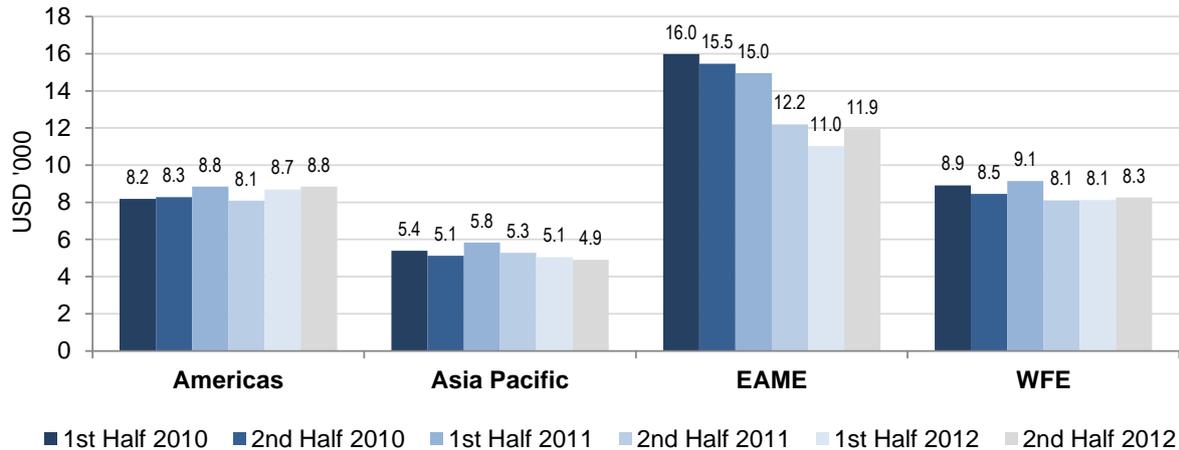
Number of EOB trades **9 780 mn** ↘ **-14.3%**

The global number of trades also decreased significantly in 2012, but in Asia Pacific and EAME, the decrease was less pronounced than for the value of share trading.

In 2012, the average transaction size (weighted by value of share trading) slightly increased from USD 8 100 to 8 300. In the EAME region the average transaction size followed the Americas trend and stopped decreasing. Though we are lacking more detailed figures, this could be an indication of the slowdown in activity of algorithmic trading (including HFT) in this region. The average transaction size in Asia Pacific is still below the WFE average indicating a very active retail market.



Average value of trades - (weighted by share value trading)



Equity and IR derivatives¹

Number of contracts traded **14.9 bn**  **-20.3%**

For the first time since 2004, the number of equity derivative contracts traded on exchanges decreased in 2012 (-21%). Index products were the most affected: -39.6% for stock index options, -20.3% for ETF options, and -14.1% for stock index futures.

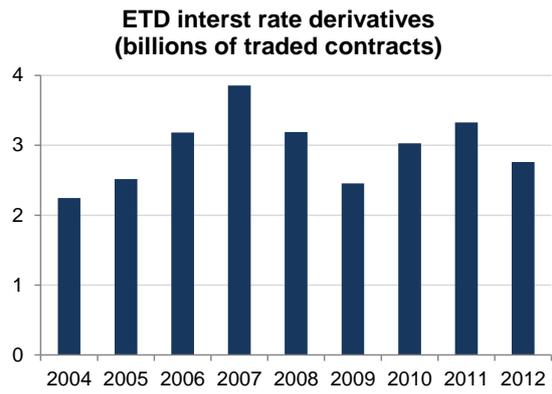
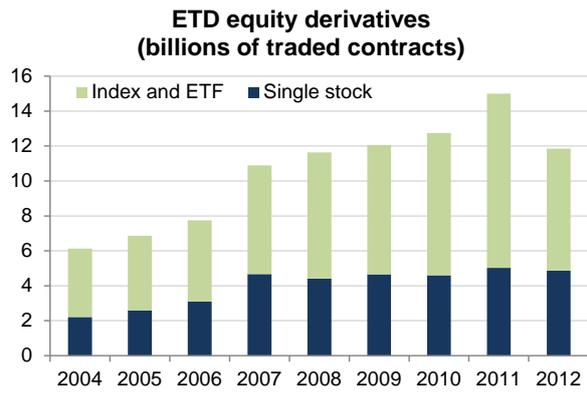
This significant decrease in stock index options was partly explained by the sharp decrease of number of index options traded on Korea Exchange following the multiplication by five of the size of the newly listed contracts on KOSPI 200 since March 2012. Excluding Korean index options, the decline in stock index options was -9.4%. And the overall decline in equity and IR derivatives was -11%.

This decline in equity derivatives mirror the one in the value of cash equities traded and is also probably explained by the significant decrease in volatility observed in 2012. Volatility indices decreased significantly in 2012, except in Japan, to end the year at relatively low levels.

- S&P 500 Volatility (VIX): - 23% (13.02)
- EURO STOXX 50 Volatility: -33.6% (21.35) and FTSE100 Volatility Index: -19.7% (18.05)
- Nikkei Stock Average Volatility Index : + 4.5% (22.45) and HSI Volatility Index : -30.2% (17.19)

The volume of Interest Rate options and futures traded also decreased significantly in 2012 (-17%). Factors generically seen as unfavorable for interest rates derivatives (low interest rates environments, no economic growth and credit expansion) continue to prevail in certain regions and could explain that trend.

¹ The figures presented here only cover the monthly statistics collected by WFE. The annual IOMA survey will provide more details on derivatives markets and offer more complete statistics on these products.



Other products

Bonds (cash markets)

Turnover value **USD 26.1 tn**  **-20%**

After two years of significant increase, Bonds trading also declined in 2012 (-20%).

ETFs

Turnover value **USD 7.3 tn**  **-31.6%**

Listings **7 721**  **+12%**

A sharp decrease (-31.6%) on the turnover realized in 2012. The decrease was mainly due to the United States performance (-33%) which represents 83% of the WFE total turnover.

Securitized derivatives

Turnover value **USD 652 bn USD**  **-43.3%**

Listings **1 263 492**  **+16.2%**

Securitized derivatives listings continued to grow (+16.2%), but overall volumes declined sharply (-43.3%)

TABLES AND GRAPHS

1. Domestic equity market capitalization

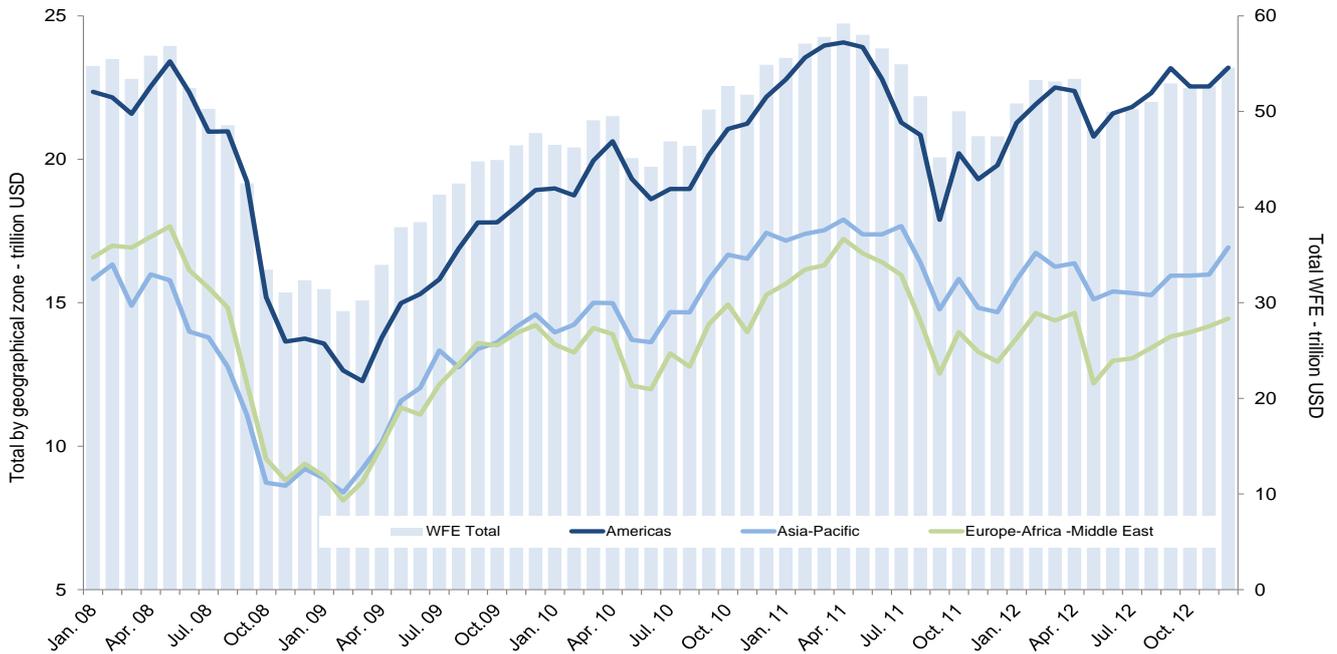
- ◆ Regional and total WFE domestic equity market capitalization performances at year-end 2012 compared to year-end 2011

Time zone	USD bn	USD bn	% change
	end-2012	end-2011	in USD
Americas	23 193	19 789	17.2%
Asia-Pacific	16 929	14 670	15.4%
Europe Africa Middle East	14 447	12 942	11.6%
Total WFE	54 570	47 401	15.1%

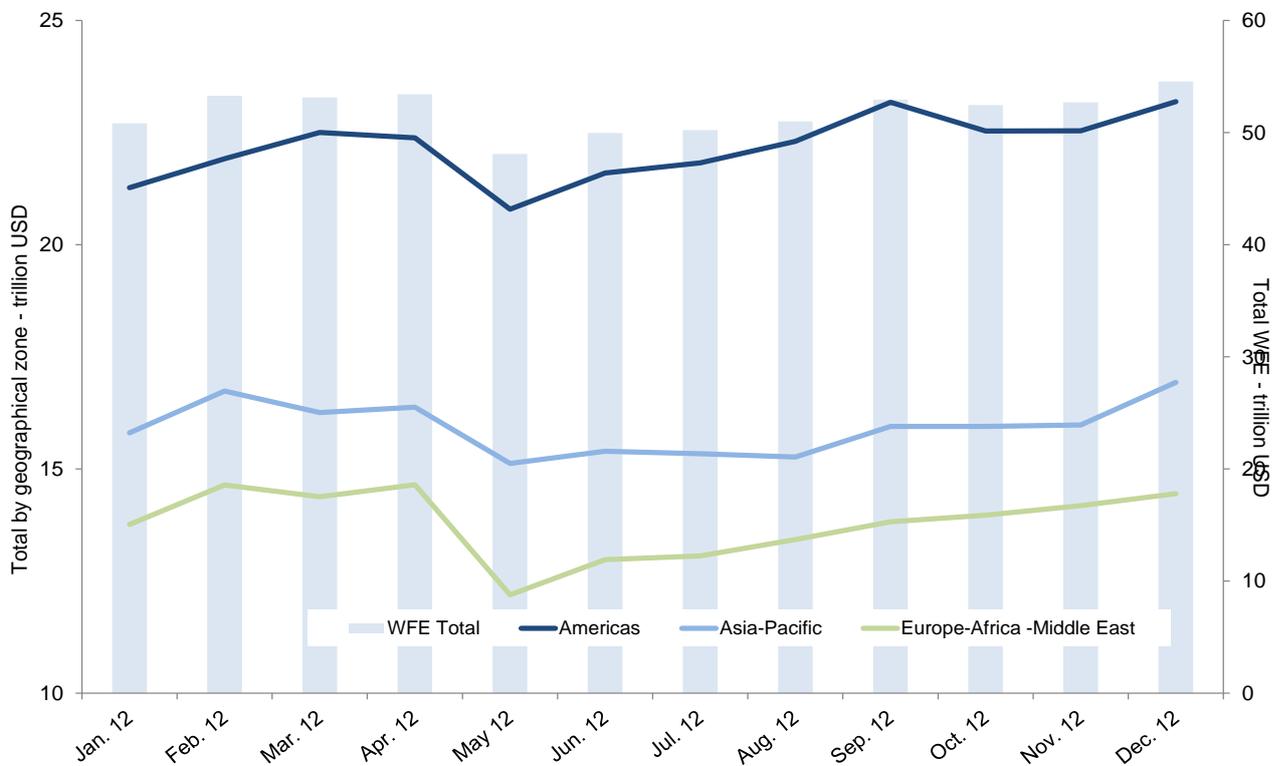
- ◆ Largest domestic equity market capitalizations at year-end 2012 and 2011

	Exchange	USD bn	USD bn	% change	% change
		end-2012	end-2011	in USD	in local currency
1	NYSE Euronext (US)	14 086	11 796	19.4%	19.4%
2	NASDAQ OMX (US)	4 582	3 845	19.2%	19.2%
3	Tokyo Stock Exchange Group	3 479	3 325	4.6%	17.6%
4	London Stock Exchange Group	3 397	3 266	4.0%	2.4%
5	NYSE Euronext (Europe)	2 832	2 447	15.8%	14.0%
6	Hong Kong Exchanges	2 832	2 258	25.4%	25.2%
7	Shanghai SE	2 547	2 357	8.1%	7.0%
8	TMX Group	2 059	1 912	7.7%	5.3%
9	Deutsche Börse	1 486	1 185	25.5%	23.6%
10	Australian SE	1 387	1 198	15.7%	14.3%

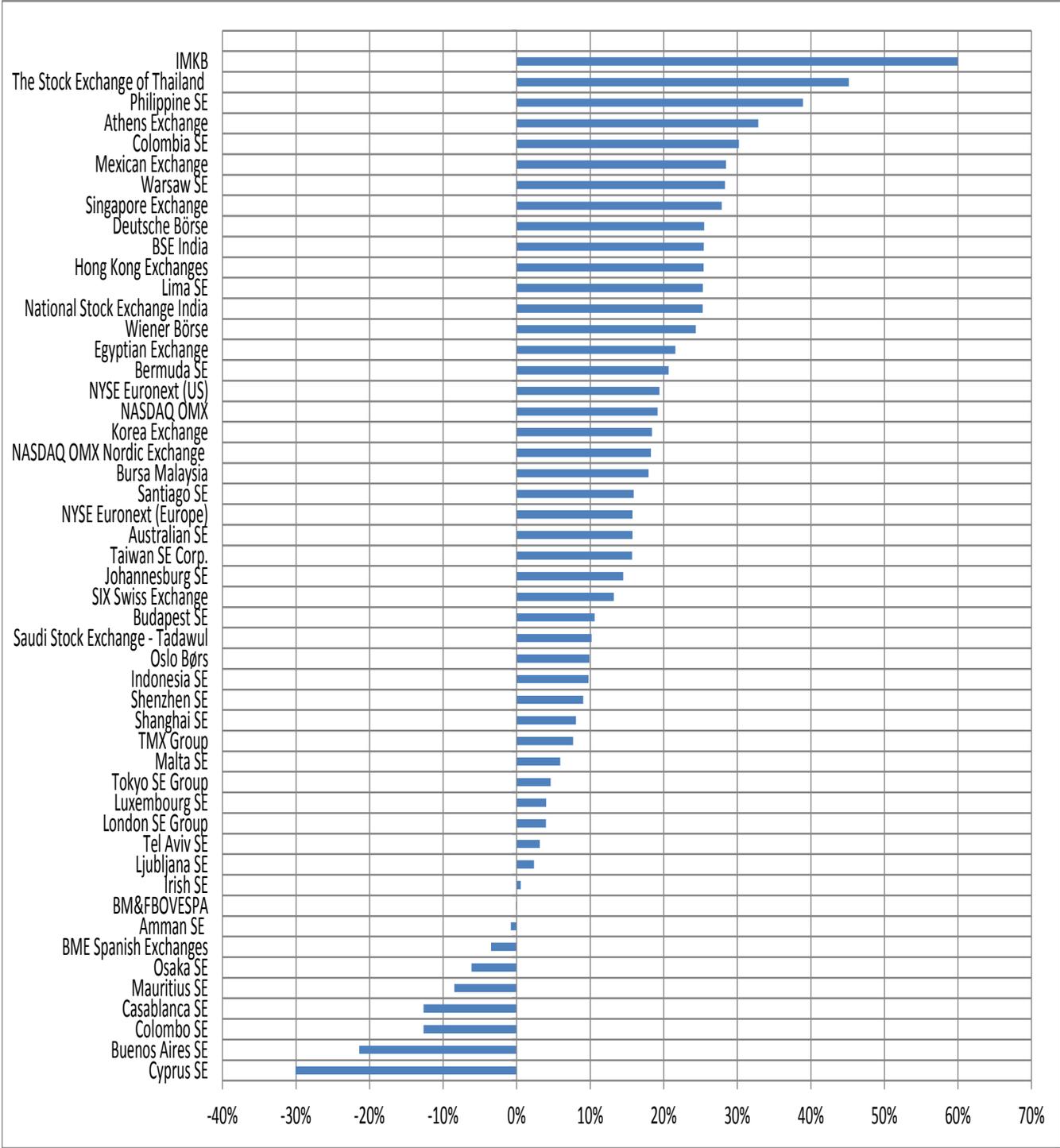
◆ Recent evolution of domestic equity market capitalization by time zones in USD trillion



◆ Zoom on 2012 - Monthly evolution of domestic equity market capitalization by time zones in USD trillion



Variations in 2012 domestic market capitalization by member – in USD
(comparison of end-December 2012 with end-December 2011)



2. Share trading value

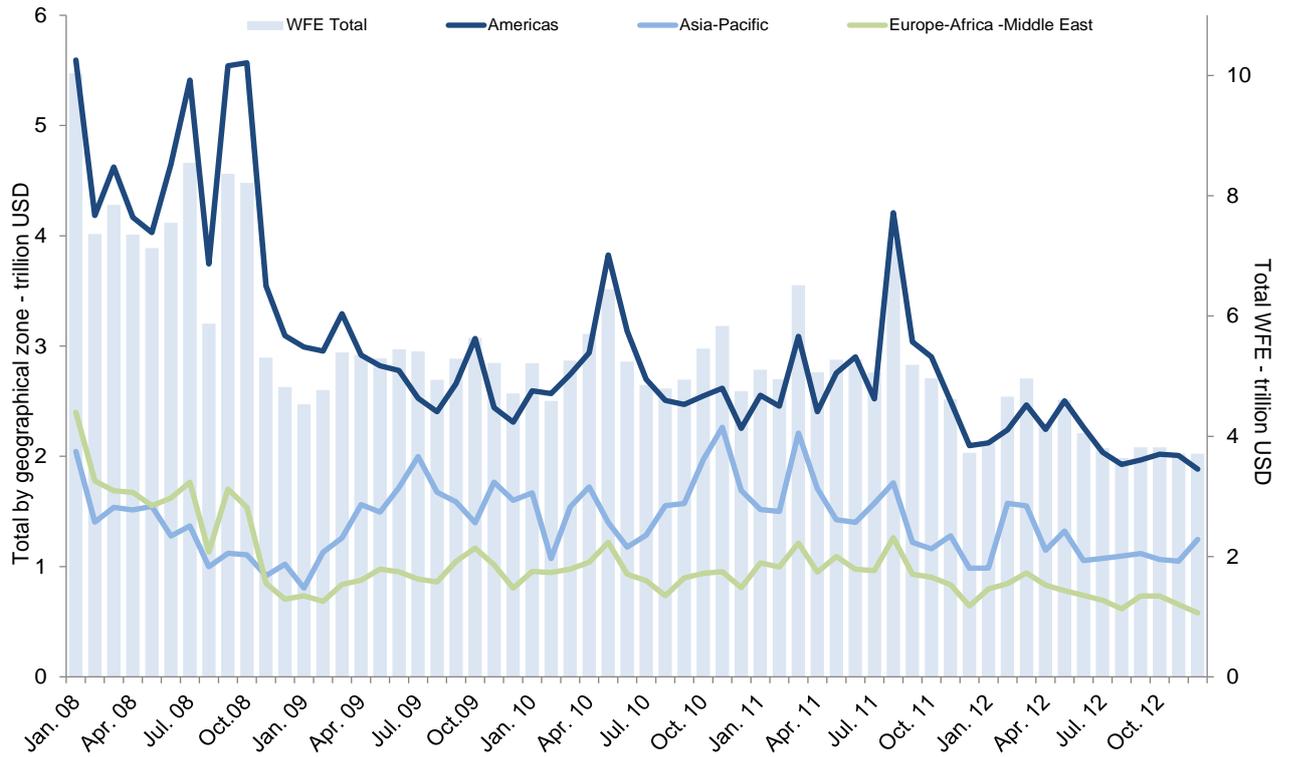
- ◆ Regional and total WFE **Electronic order book** share trading value performances in 2012 compared with 2011

Time zone	USD bn	USD bn	% change
	Jan-Dec 2012	Jan-Dec 2011	in USD
Americas	25 679	33 447	-23.2%
Asia-Pacific	14 195	17 740	-20.0%
Europe Africa Middle East	8 951	11 801	-24.1%
Total WFE	48 825	62 987	-22.5%

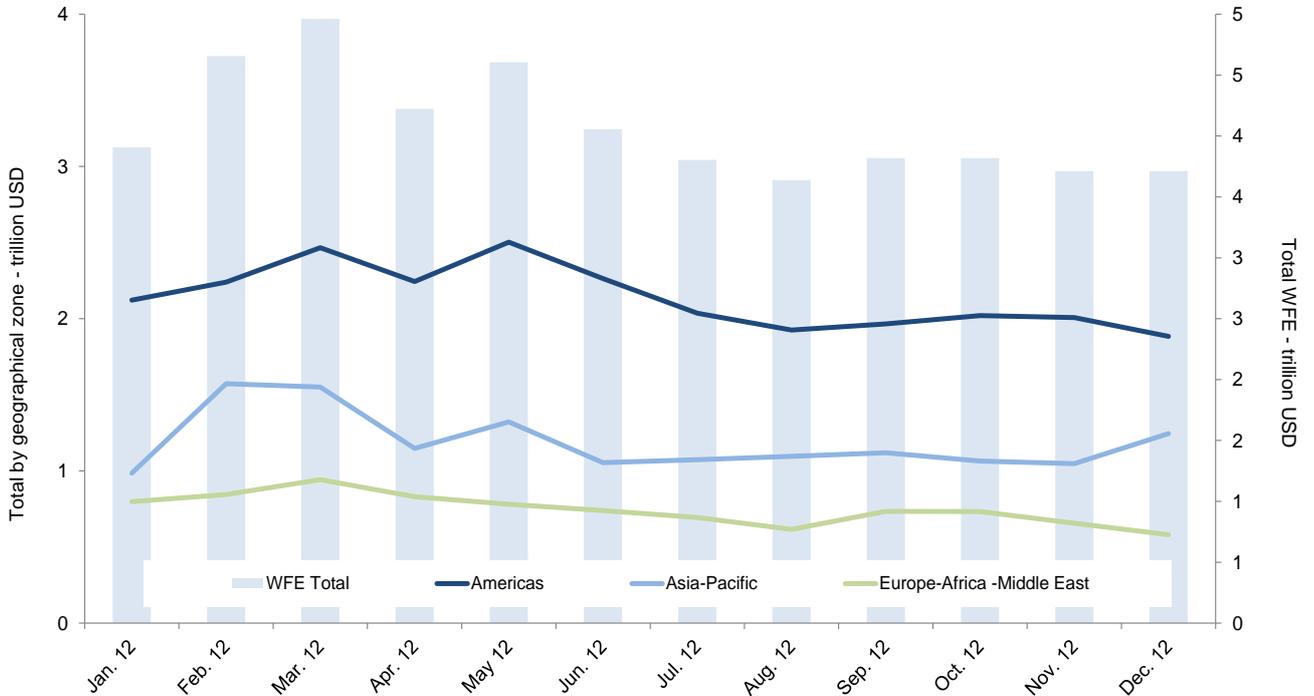
- ◆ Largest exchanges by value of share trading in the **Electronic order book** in 2012 and 2011

	Exchange	USD bn	USD bn	% change	% change
		2012	2011	In USD	in local currency
1	NYSE Euronext US	13 443	18 027	-25.4%	-25.4%
2	NASDAQ OMX US	9 784	12 724	-23.1%	-23.1%
3	Tokyo Stock Exchange Group	3 463	3 972	-12.8%	-12.2%
4	Shanghai Stock Exchange	2 599	3 658	-29.0%	-30.8%
5	Shenzhen Stock Exchange	2 369	2 838	-16.5%	-18.5%
6	London Stock Exchange Group	2 194	2 837	-22.7%	-16.0%
7	NYSE Euronext Europe	1 576	2 134	-26.1%	-19.7%
8	Korea Exchange	1 518	2 029	-25.2%	-23.9%
9	TMX Group	1 357	1 542	-12.0%	-10.8%
10	Deutsche Börse	1 276	1 758	-27.4%	-21.2%

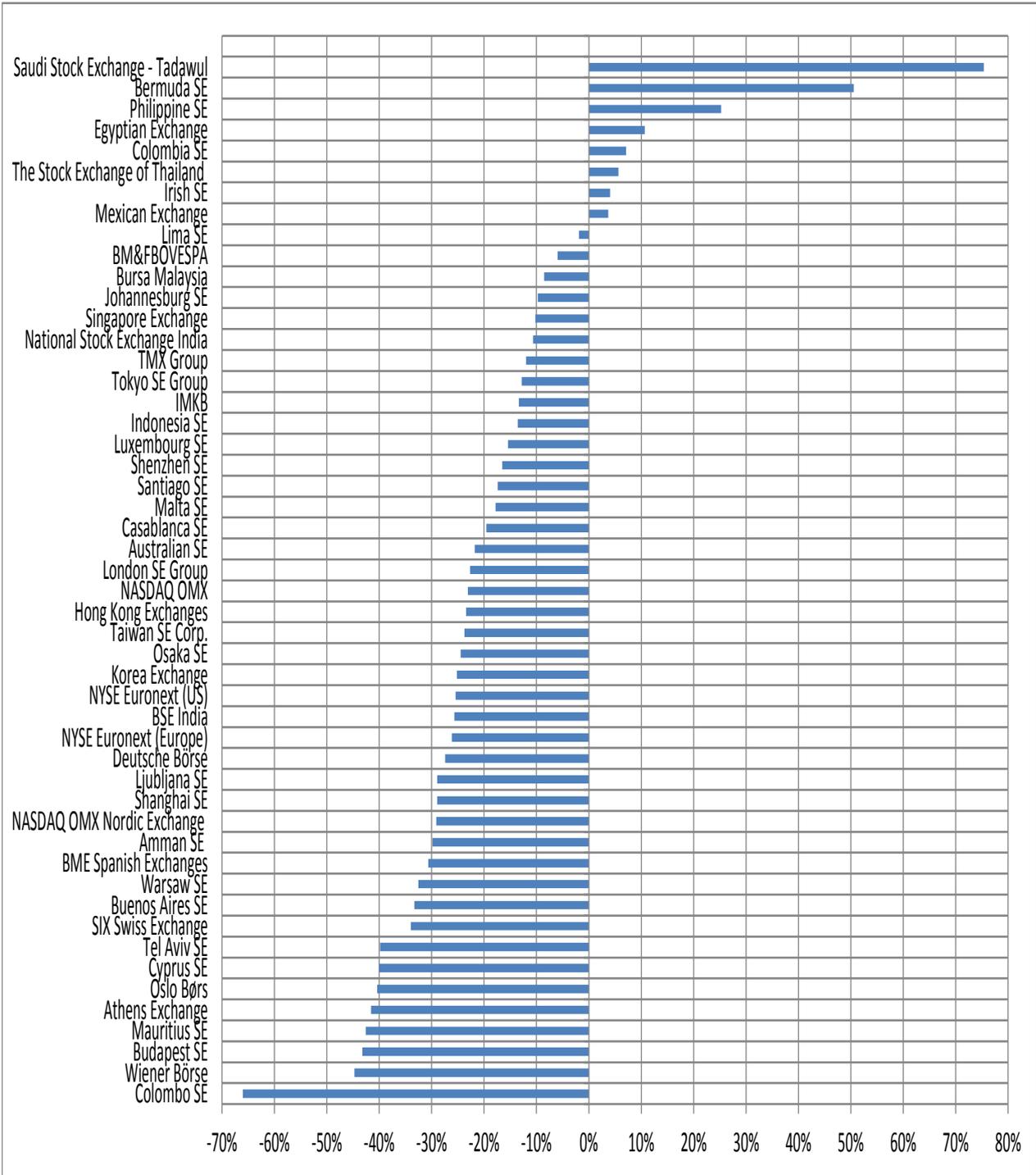
Recent evolution of Electronic order book share trading value by time zones in USD trillion



◆ Zoom on 2012 - Monthly evolution of electronic order book share trading value by time zone in USD trillion



Variations in 2012 Electronic order book share trading value by member – in USD
(comparison of the period January - December 2012 with the same period of 2011)



3. Number of trades in equity shares & average value of trades

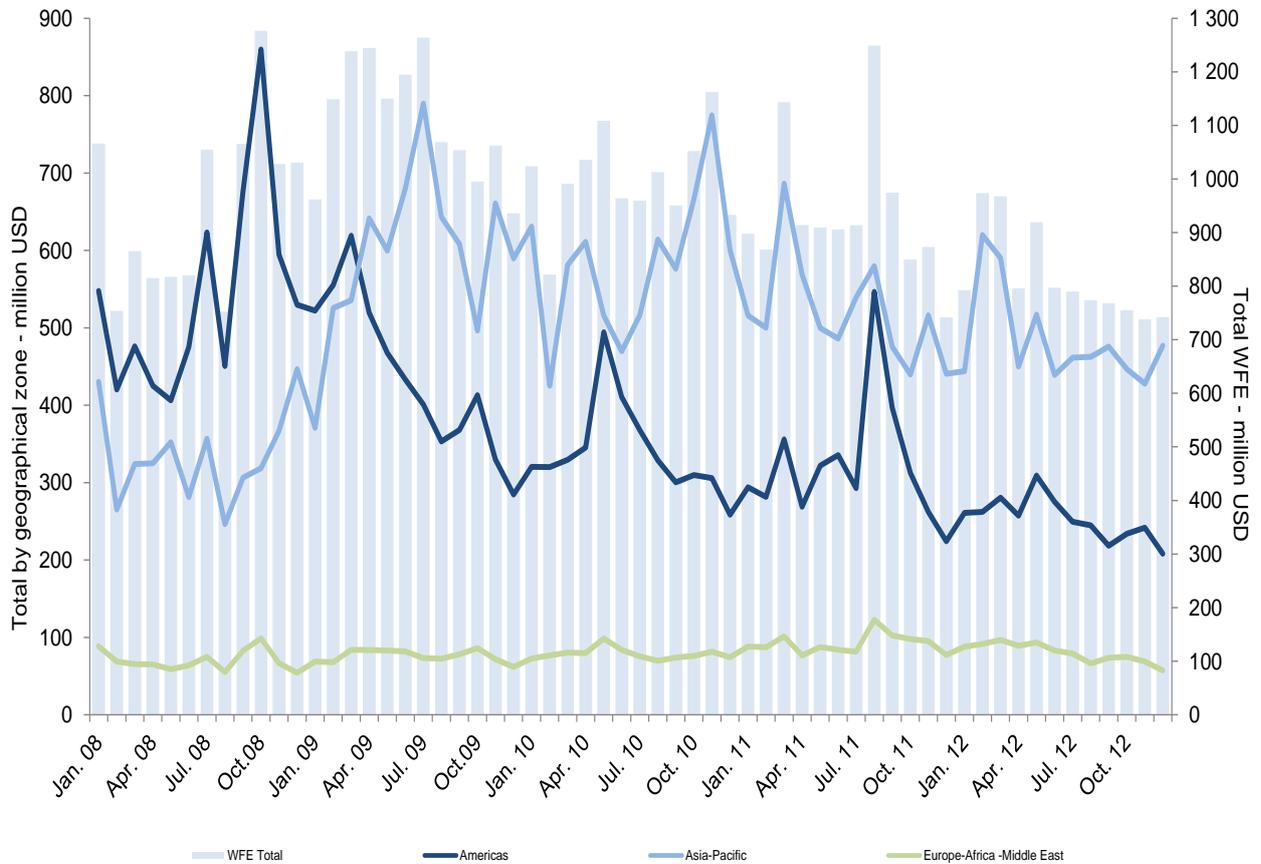
- ◆ Regional and total WFE Electronic order book share trading value performances in 2012 compared with 2011

Time zone	Jan-Dec 2012 <i>(in thousand)</i>	Jan-Dec 2011 <i>(in thousand)</i>	%change
Americas	3 041 420	4 054 948	-25.0%
Asia-Pacific	5 777 006	6 250 688	-7.6%
Europe Africa Middle East	961 095	1 100 082	-12.6%
Total WFE	9 779 522	11 405 719	-14.3%

- ◆ Largest exchanges by number of trades in equity shares in the Electronic order book in 2012 and 2011

	Exchange	Jan-Dec 2012 <i>(in thousand)</i>	Jan-Dec 2011 <i>(in thousand)</i>	%change
1	National Stock Exchange India	1 406 498	1 384 112	1.6%
2	NYSE Euronext (US)	1 374 539	1 994 898	-31.1%
3	NASDAQ OMX	1 268 037	1 702 750	-25.5%
4	Korea Exchange	1 218 992	1 191 124	2.3%
5	Shenzhen SE	935 565	1 030 324	-9.2%
6	Shanghai SE	925 550	1 273 277	-27.3%
7	BSE India	355 586	393 223	-9.6%
8	Tokyo SE Group	349 546	340 644	2.6%
9	London SE Group	222 029	237 939	-6.7%
10	TMX Group	215 796	222 777	-3.1%

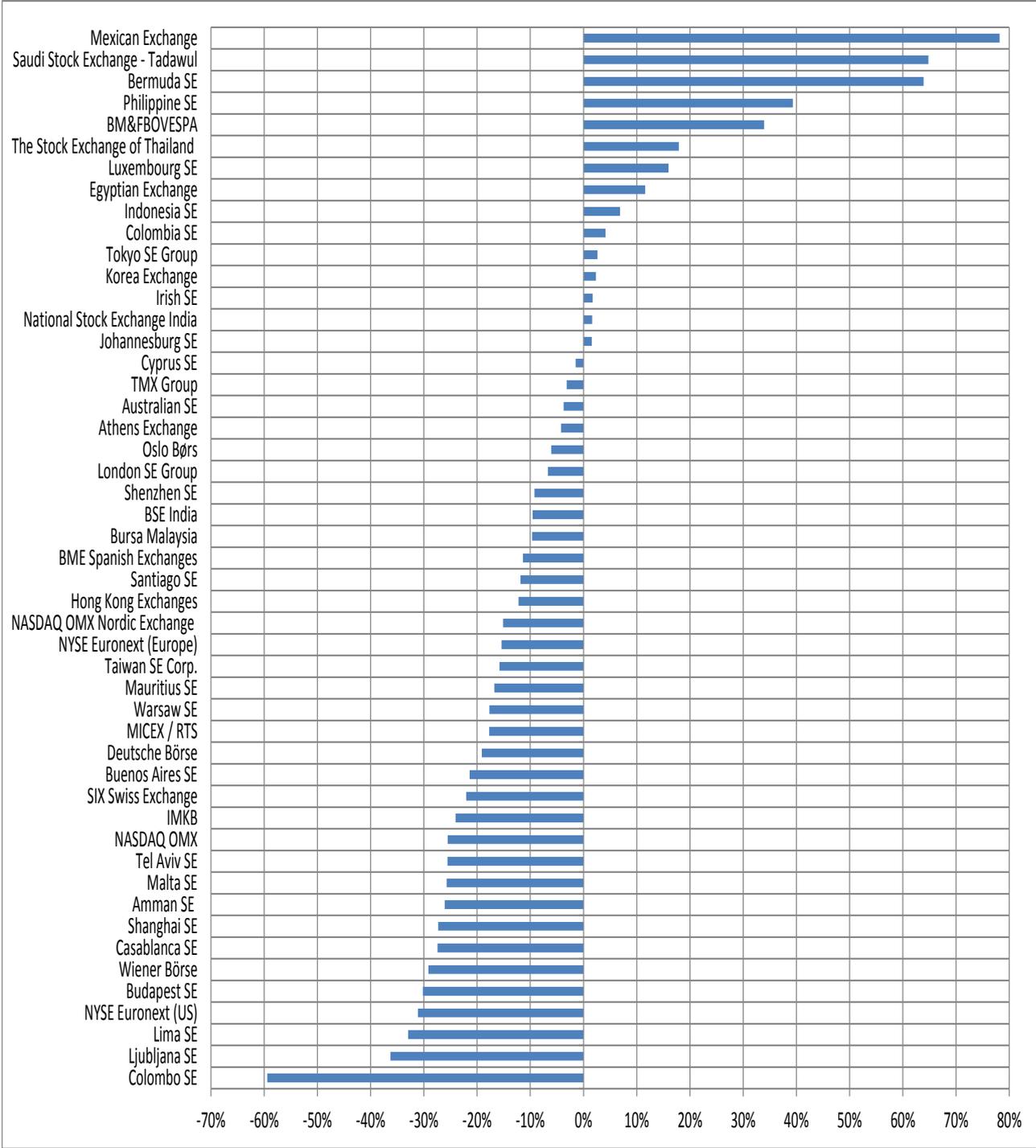
Recent evolution of Electronic order book number of trades in equity shares by time zones



◆ Average value of trades (weighted by trading value)

Time zone	USD	USD	%change
	Dec 2012	Dec 2011	
Americas	9 640	8 330	15.7%
Asia-Pacific	4 940	4 660	6.0%
Europe Africa Middle East	13 720	11 120	23.4%
Total WFE	8 680	7 850	10.6%

Variations in 2012 Electronic order book number of trades in share by member (comparison of the period January - December 2012 with the same period of 2011)



4. Broad equity market index performances among WFE members

- ◆ Top 10 performing broad market indexes last year, in local currency terms

	Exchange	% change 2012 / 2011
1.	IMKB	52.6%
2.	Egyptian Exchange	50.8%
3.	Stock Exchange of Thailand	35.8%
4.	Athens Exchange	33.4%
5.	Philippine Stock Exchange	33.0%
6.	National Stock Exchange India	31.8%
7.	BSE India	31.2%
8.	Warsaw Stock Exchange	26.2%
9.	Deutsche Börse	24.8%
10.	NASDAQ OMX Nordic Copenhagen	24.2%

Broad equity market index performances by time zone

- ◆ Top 5 performing broad market indexes last year, in local currency terms

	Americas	% change 2012 / 2011
1.	Mexican Exchange	19.9%
2.	Colombia Stock Exchange	16.2%
3.	NASDAQ OMX US	15.9%
4.	Buenos Aires Stock Exchange	13.5%
5.	NYSE Euronext US	12.9%

	Asia / Pacific	% change 2012 / 2011
1.	Stock Exchange of Thailand	35.8%
2.	Philippine Stock Exchange	33.0%
3.	National Stock Exchange India	31.8%
4.	BSE India	31.2%
5.	Hong Kong Exchanges	21.7%

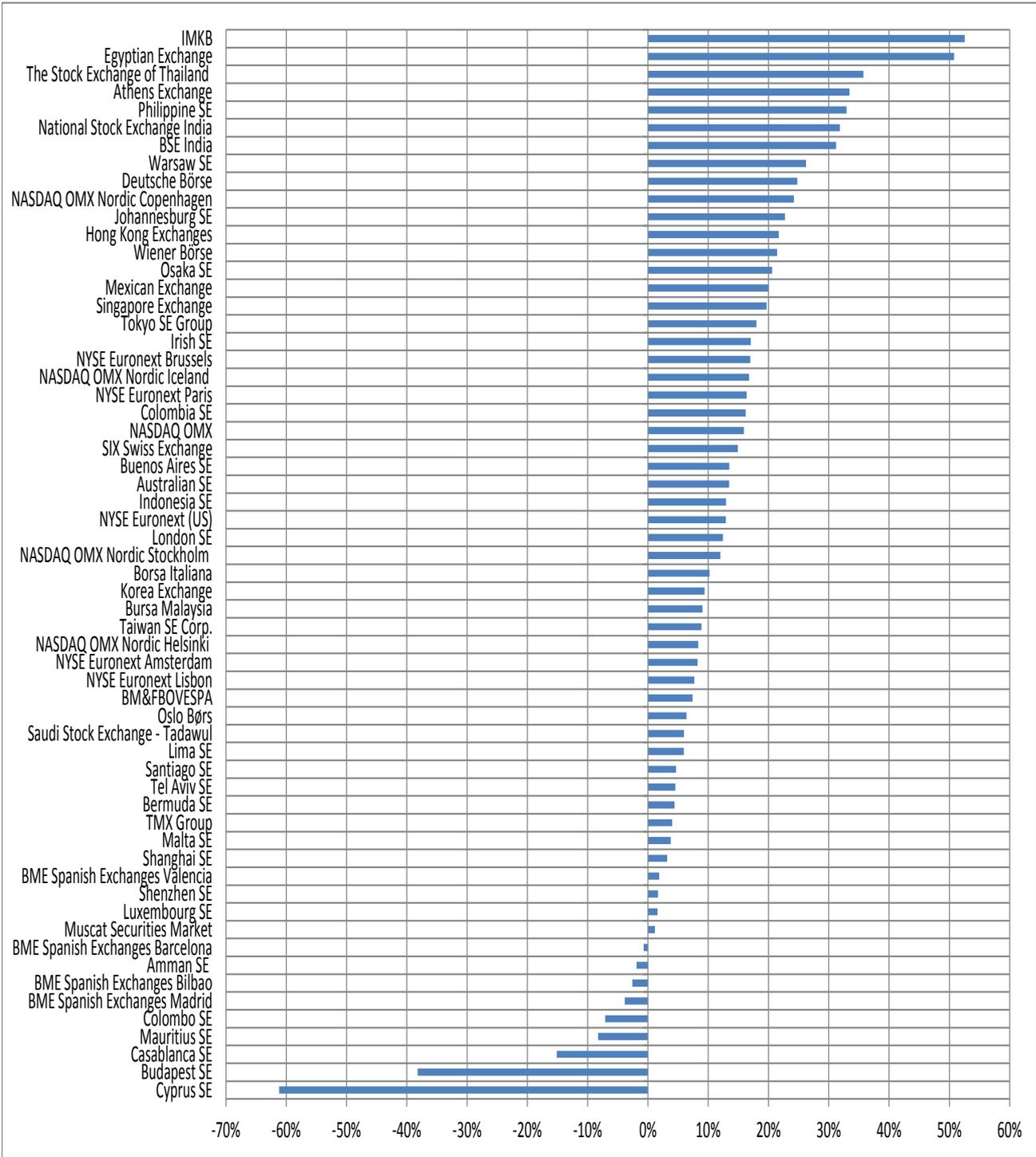
	Europe/Africa/Middle East	% change 2012 / 2011
1.	IMKB	52.6%
2.	Egyptian Exchange	50.8%
3.	Athens Exchange	33.4%
4.	Warsaw Stock Exchange	26.2%
5.	Deutsche Börse	24.8%

◆ Index performance gains by time zones

WFE member exchange broad equity market indexes, weighted by market capitalization increased by 13.3% on average in local currency in 2012 compared to 2011, and by 13.8% on average in US dollar terms.

Time zone	Average performance in 2012 v. 2011 in local currency	Average performance in 2012 v. 2011 in USD
Americas	12.3%	12.5%
Asia-Pacific	14.7%	13.1%
Europe/Africa/Middle East	13.4%	16.1%
WFE Average	13.3%	13.8%

Variations in 2012 broad market indexes – in local currency terms
(comparison of end-December 2012 with end-December 2011)



5. Value of bond trading

- ◆ Regional and total WFE bond trading value performances in 2012 compared to 2011

Time zone	USD bn	USD bn	%change
	Jan-Dec 2012	Jan-Dec 2011	in USD
Americas	1 050	1 188	-11.6%
Asia-Pacific	1 539	1 004	53.3%
Europe Africa Middle East	23 468	30 369	-22.7%
Total WFE	26 057	32 561	-20.0%

- ◆ Largest exchanges by total value of bonds traded, in 2012 in USD terms

	Exchange	USD bn	USD bn	%change in USD	%change in local currency
		2012	2011		
1	BME Spanish Exchanges	11 132	17 412	-36.1%	-30.7%
2	London SE Group	4 575	5 394	-15.2%	-8.1%
3	NASDAQ OMX Nordic Exchange	3 031	2 674	13.3%	21.3%
4	Johannesburg SE	2 805	2 898	-3.2%	10.0%
5	Korea Exchange	1 226	747	64.1%	66.9%
6	Colombia SE	836	916	-8.7%	-11.1%
7	IMKB	520	518	0.3%	7.9%
8	Oslo Børs	505	590	-14.5%	-11.9%
9	GreTai Securities Market	352	NA	-	-
10	MICEX/ RTS	334	301	11.2%	-

6. Securitized derivatives: number of listings and turnover by region in 2012 & 2011

Time zone	Number of listings at end 2012	Number of listings at end 2011	Turnover (USD bn) 2012	Turnover (USD bn) 2011	% change
Americas	183	156	0.6	1.1	-41.4%
Asia Pacific	23 279	24 026	482.9	886.5	-45.5%
Europe Africa Middle East	1 240 030	1 062 773	168.5	264.6	-36.3%
Total WFE	1 263 492	1 086 955	652.0	1 150.0	-43.3%

◆ Top 5 exchanges by value of securitized derivatives traded in USD terms in 2012

	Exchange	USD bn in 2012	USD bn in 2011	% change
1	Hong Kong Exchanges	410.0	576.0	-28.8%
2	Deutsche Börse	65.4	96.6	-32.3%
3	Korea Exchange	53.5	288.6	-81.5%
4	SIX Swiss Exchange	34.2	59.3	-42.3%
5	NYSE Euronext (Europe)	24.0	42.6	-43.6%

7. ETFs: number of listings and turnover by region in 2012 & 2011

Time zone	Number of listings at end 2012	Number of listings at end 2011	Turnover (USD bn) 2012	Turnover (USD bn) 2011	% change
Americas	2 433	2 269	6 295.6	9 319.2	-32.4%
Asia Pacific	683	587	341.2	335.2	1.8%
Europe Africa Middle East	4 605	4 053	651.6	1 008.2	-35.4%
Total WFE	7 721	6 909	7 288.3	10 662.6	-31.6%

◆ Top 5 exchanges by value of ETFs traded in USD terms in 2012

	Exchange	USD bn in 2012	USD bn in 2011	% change
1	NYSE Euronext US	3 189.8	4 797.0	-33.5%
2	NASDAQ OMX US	2 889.5	4 308.8	-32.9%
3	London Stock Exchange Group	262.0	325.7	-19.6%
4	Deutsche Börse	175.3	306.9	-42.9%
5	Korea Exchange	120.4	108.9	10.6%

8. Derivatives markets

- ◆ Derivatives market performances by number of contracts traded and by product in 2012

Product	Millions of contracts traded in 2012	2012/2011 growth rate
Single stock options ⁽¹⁾	3 850	-1.8%
Single stock futures	1 019	-8.2%
Stock index options ⁽²⁾	3 740	-39.6% ⁽³⁾
Stock index futures	2 158	-14.1%
ETF options	1 324	-20.3%
Total equity derivatives	12 091	-21% ⁽³⁾
Interest rate options	535	-19.7%
Interest rate futures	2 226	-16.4%
Total interest rate derivatives	2 761	-17%
Commodity options	172	3.1%
Commodity futures	1 037	-1.7%
Total commodity derivatives	1 209	-1.1%

(1) In 2011, the size of contracts traded on Australian Securities Exchange decreased while most contracts' size increased on Eurex.

(2) In March 2012, the size of KOSPI 200 options contracts newly listed on Korea Exchange was multiplied by five.

(3) Excluding Index Options Traded on BSE Limited

- ◆ Top 5 exchanges by number of equity derivatives traded in 2012

Single stock options

	Exchange	Contracts traded (million) 2012	Contracts traded (million) 2011	% change
1	BM&FBOVESPA	929	838	10.9%
2	NASDAQ OMX (US)	639	701	-8.8%
3	NYSE Euronext (US)	595	634	-6.2%
4	Chicago Board Options Exchange	494	516	-4.2%
5	International Securities Exchange	457	431	6.0%

Single stock futures

	Exchange	Contracts traded (million) 2012	Contracts traded (million) 2011	% change
1	NYSE.Liffe Europe	247	250	-1.6%
2	MICEX/ RTS	241	363	-33.4%
3	EUREX	196	174	12.6%
4	National Stock Exchange India	153	161	-4.8%
5	Korea Exchange	100	60	67.6%

Stock index options

	Exchange	Contracts traded (million)	Contracts traded (million)	% change
		2012	2011	
1	Korea Exchange	1 575	3 672	-57.1%
2	National Stock Exchange India	820	871	-5.9%
3	EUREX	383	468	-18.3%
4	Chicago Board Options Exchange	304	320	-5.0%
5	Bombay SE	235	0	-

Stock index futures

	Exchange	Contracts traded (million)	Contracts traded (million)	% change
		2012	2011	
1	CME Group	588	736	-20.0%
2	EUREX	384	486	-21.1%
3	MICEX/ RTS	323	382	-15.4%
4	Osaka SE	150	137	9.3%
5	National Stock Exchange India	112	156	-27.9%

ETF options

	Exchange	Contracts traded (million)	Contracts traded (million)	% change
		2012	2011	
1	NYSE Euronext (US)	379	476	-20.5%
2	NASDAQ OMX (US)	349	471	-25.9%
3	Chicago Board Options Exchange	312	368	-15.4%
4	International Securities Exchange	277	339	-18.2%
5	Bourse de Montreal	4	4	13.9%

IR options

	Exchange	Contracts traded (million)	Contracts traded (million)	% change
		2012	2011	
1	CME Group	228	273	-16.6%
2	BM&FBOVESPA	124	116	7.3%
3	NYSE Liffe Europe	112	177	-36.8%
4	EUREX	49	81	-39.2%
5	NYSE Euronext (US)	12	15	-22.6%

IR futures

	Exchange	Contracts traded (million)	Contracts traded (million)	% change
		2012	2011	
1	CME Group	995	1 246	-20.1%
2	BM&FBOVESPA	377	342	10.2%
3	NYSE.Liffe Europe	339	401	-15.5%
4	EUREX	277	549	-49.6%
5	ASX SFE Derivatives Trading	88	-	-