

## 2011 WFE Market Highlights

**2011 equity volumes remained stable despite a fall in market capitalization. Derivatives, bonds, ETFs, and securitized derivatives continued to grow strongly.**

*Total turnover value remained stable in 2011 at USD 63 tn despite a sharp decrease of the global market capitalization (-13.6% at USD 47 tn). High volatility and global uncertainty created from the sovereign debt crisis affected volumes all year through and made August 2011 the most active month in terms of trading value, a highly unusual annual peak for markets.*

*Despite overall unfavorable conditions for primary markets in several regions, WFE members increased their total listings by 1.7% totaling 45 953 companies listed.*

*Total number of trades decreased by 6.4% at 112 tn. This trend combined with the stability of turnover value led to a small increase in the average size of transaction which was USD 8 700 in 2011.*

*The high volatility and lack of confidence that affected financial markets globally probably drove the needs of hedging as derivatives contracts traded grew by 8.9%.*

*WFE members continued to diversify their products range as other products such as bonds, ETFs, and securitized derivatives all had solid growth in 2011.*

## Equity Markets

Market capitalization **USD 47 tn**  **-13.6%**

Domestic market capitalization declined significantly in 2011 to USD 47 401 bn roughly back to the same level of end 2009. The decline affected almost all WFE members, as there were only four exchanges ending 2011 with a higher market capitalization.

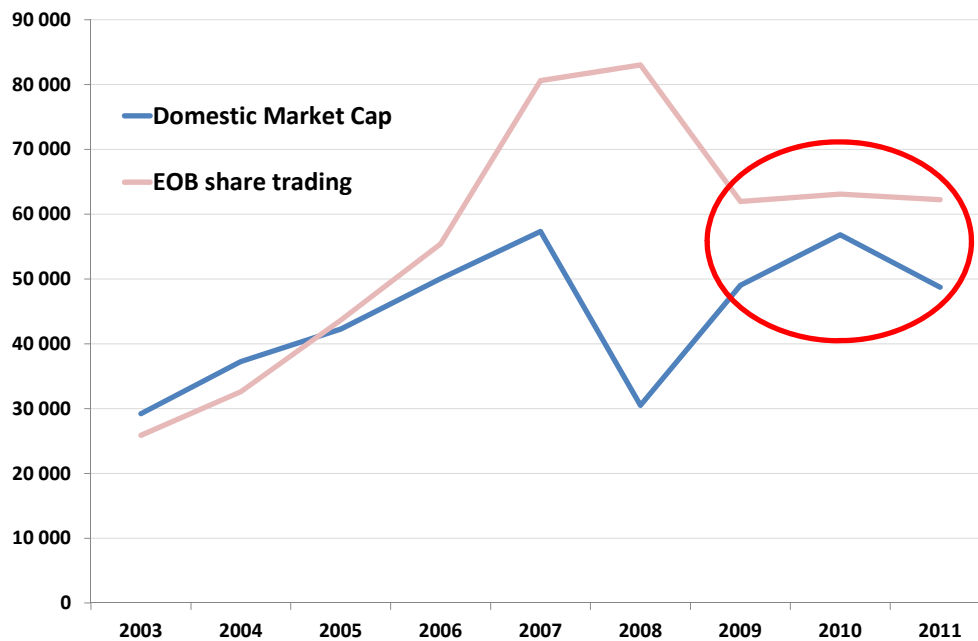
The magnitude of the decline is quite similar among the three time zones: -15.9% in Asia-Pacific, -15.2% in EAME and -10.8% in the Americas. The relative better performance of the latter is mostly due to NYSE Euronext (US) which represented almost 60% of the total region market capitalization and 25% of the WFE total.

The only change in 2011 in the top 10 exchanges by market capitalization is the Australian Stock Exchanges reaching the 10<sup>th</sup> rank. The Indian exchanges are no longer part of the top 10 as their market capitalization fell dramatically (-38% in USD terms). This trend has been reinforced by foreign exchange variation, since their market capitalization only fell by 26% in local currency.

## EOB value of share trading USD 63 tn -0.1%

Despite the market capitalization decline, Electronic Order Book (EOB) turnover value remained stable at 63 080 USD bn; as for the market capitalization, this is roughly the same level as in 2009.

It is interesting to note that the value of share trading has been extremely stable the last three years despite market capitalization swings (although those swings were less abrupt compared to the previous years).



In contrast to the market capitalization figure, there are diverging regional evolutions: -6.2% in Asia-Pacific; +1.7% in the Americas and +4.6% in EAME. The EAME performance is in fact the reflect of contrasted performance within this time zone, and is mostly due to the relative good performance of the region's largest markets in terms of volumes (London SE Group, NYSE Euronext (Europe), and Deutsche Börse).

The global total (-0.1%) is heavily influenced by the two largest exchanges by turnover value (NYSE Euronext (US) and NASDAQ OMX US) which represented almost 50% of the total EOB value of share trading and were both stable in 2011 compared to 2010 (+1.3% and +0.5% respectively).

2011 was marked by an unusual trading pattern as monthly volumes peaked in August 2011 representing 11.5% of the year's total volumes (7.6% in 2010) or 38% higher than the monthly average for the year. As a reference, the 2011 August volumes reached USD 7 233 bn, to be compared for instance with the average monthly value reached in 2008 (USD 7 369 bn) where turnover value peaked at its historic height. This unusual monthly peak was due to extreme volatility and uncertainty that affected global markets due to the sovereign debt crisis.

Looking at the top 10 exchanges by value of share trading, TMX Group replaced Hong Kong Exchanges as number 10.

Number of listings **45 953**  **+1.7%**

Despite an overall unfavorable macroeconomic environment for primary markets in several regions, the number of listings among WFE members increased slightly: +1.7%.

Number of EOB trades **112 bn**  **-6.4%**

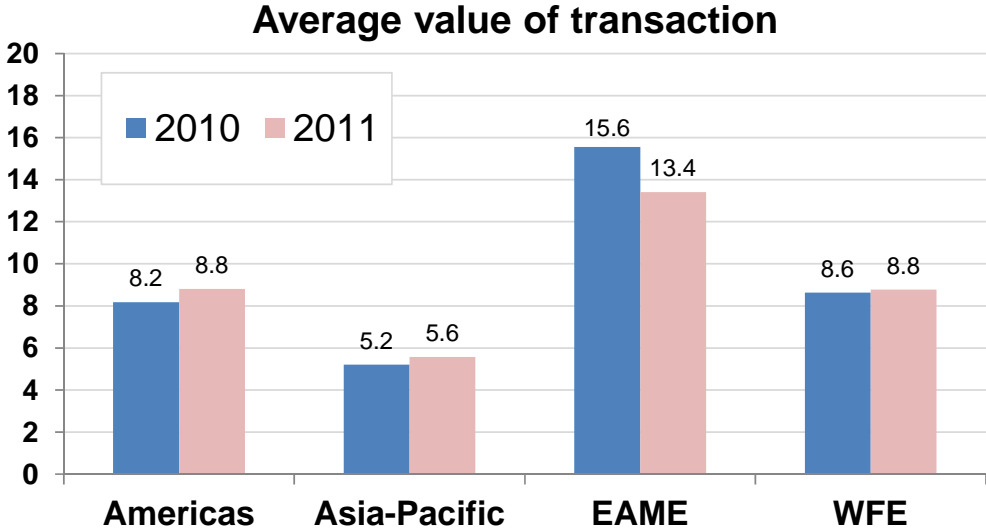
There was a strong contrast between the Americas and Asia-Pacific (-4.8% and -10.5% respectively) and EAME (+17%); as the latter represents less than 10% of the total number of trades, the overall WFE trend is downwards (-6.4%). The number of trades is largely driven by US exchanges (NYSE Euronext US and NASDAQOMX) reflecting the weight of these exchanges in overall volumes; and the Asia Pacific region which overall represented 55% of the trades, reflecting the predominance of retail investors in some markets in this region.

Average size of transaction **USD 8 700**  **+1.8%**

Not surprisingly, given a stable value of share trading and a declining number of trades, the average transaction size (weighted by value of share trading) is slightly up at USD 8 700.

The contrasted evolution noted above regarding the evolution of number of trades is even more acute regarding the average transaction size. With slightly higher turnover value and a decline of number of trades, the Americas average transaction size is up almost 8%. In Asia-Pacific the significant decline in number of trades also drove a 6.8% increase in the average transaction size. This time zone average transaction size is still below the WFE average at USD 5 600 overall indicating a very active retail market.

The surge in transactions in EAME (+17%) largely outpacing the growth of turnover value (+4.6%) led to a significant decline in the average transaction size (-13.8%) at USD 13 400. As noted in the last two years reports, this confirms the tendency of this region to converge with the WFE average. Though we are lacking more detailed figures, it could also indicate the continuing growth of algorithmic trading (including HFT) in the region whereas the Americas region, largely dominated by the US exchanges (because of the turnover value weighting), is probably more mature regarding this trend, and that the Asia-Pacific market seems to have been impacted less by this trend.



# Derivatives<sup>1</sup>

Number of contracts traded **18.5 bn**  **+8.9%**

The growth in number of contracts traded is mostly due to the growth of volumes of stock index options and futures, as well as ETF options, confirming the trend observed in 2010.

Given the high volatility of markets in 2011, this increase in derivatives volumes seems logical as hedging needs were probably driven upwards by volatility. The relative preference for indices or ETFs underlyings compared to single stocks could also be interpreted similarly. Interest rates derivatives confirmed the rebound observed in 2010 and continued to grow in 2011 despite factors generically seen as unfavorable (low interest rates environments, no economic growth and credit expansion<sup>1</sup>) in certain regions.

## Other products

### ***Bonds (cash markets)***

Turnover value **USD 32.5 tn**  **+35.5%**

Bonds trading confirmed the trend observed in 2010 and continued to grow very strongly reflecting the growing interest of some WFE members for fixed-income products.

### ***ETFs***

Turnover value **USD 10.3 tn**  **+7.5%**

Listings **6 909**  **+24%**

Number of ETF listings grew by 24% and volumes by 7.5%. The Americas region is still largely dominating this segment (87% of the total volumes) but the two other regions are continuing to catch up with higher growth rates.

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<sup>1</sup> 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.

## Securitized derivatives

Turnover value **USD 1.1 tn**  **+2%**

Listings **1 086 955**  **+51%**

Securitized derivatives listings grew by 51%, mostly due to a surge in listings in the EAME region where turnover value was also significantly up (+23%). Overall volumes are almost stable (+2%) as the Asia-Pacific region still dominates volumes figures (77% of overall total) which were down 3% in the region.

# TABLES AND GRAPHS

## 1. Domestic equity market capitalization

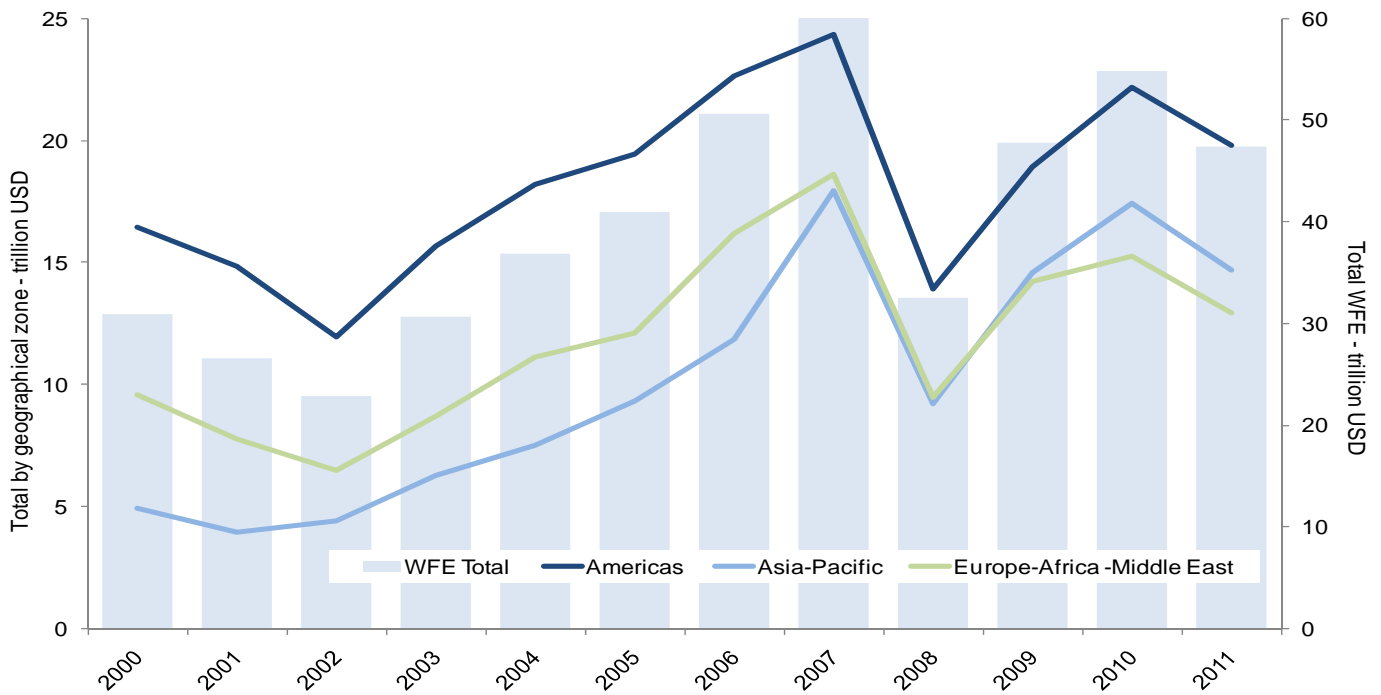
- ◆ Regional and total WFE domestic equity market capitalization performances at year-end 2011 compared to year-end 2010

Time zone	USD bn	USD bn	% change
	end-2011	end-2010	in USD
Americas	19 789	22 173	-10.8%
Asia-Pacific	14 670	17 435	-15.9%
Europe Africa Middle East	12 942	15 254	-15.2%
<b>Total WFE</b>	<b>47 401</b>	<b>54 862</b>	<b>-13.6%</b>

- ◆ Largest domestic equity market capitalizations at year-end 2011 and 2010

	Exchange	USD bn	USD bn	% change	% change
		end-2011	end-2010	in USD	in local currency
1	NYSE Euronext (US)	11 796	13 394	-11.9%	-11.9%
2	NASDAQ OMX (US)	3 845	3 889	-1.1%	-1.1%
3	Tokyo Stock Exchange Group	3 325	3 828	-13.1%	-17.6%
4	London Stock Exchange Group	3 266	3 613	-9.6%	-6.6%
5	NYSE Euronext (Europe)	2 447	2 930	-16.5%	-13.7%
6	Shanghai Stock Exchange	2 357	2 716	-13.2%	-17.1%
7	Hong Kong Exchanges	2 258	2 711	-16.7%	-16.8%
8	TMX Group	1 912	2 170	-11.9%	-9.7%
9	BM&FBOVESPA	1 229	1 546	-20.5%	-10.7%
10	Australian Securities Exchange	1 198	1 454	-17.6%	-17.6%

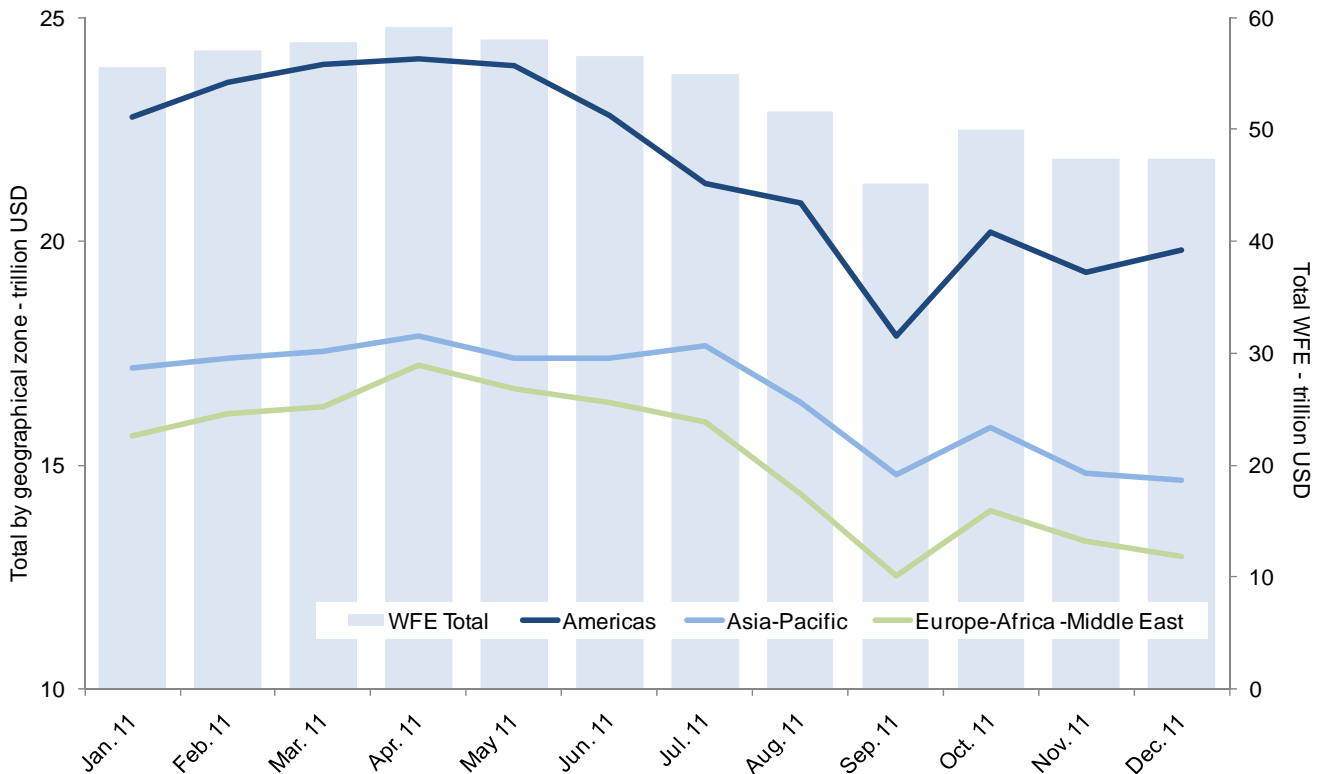
◆ Recent evolution of domestic equity market capitalization by time zones in USD trillion



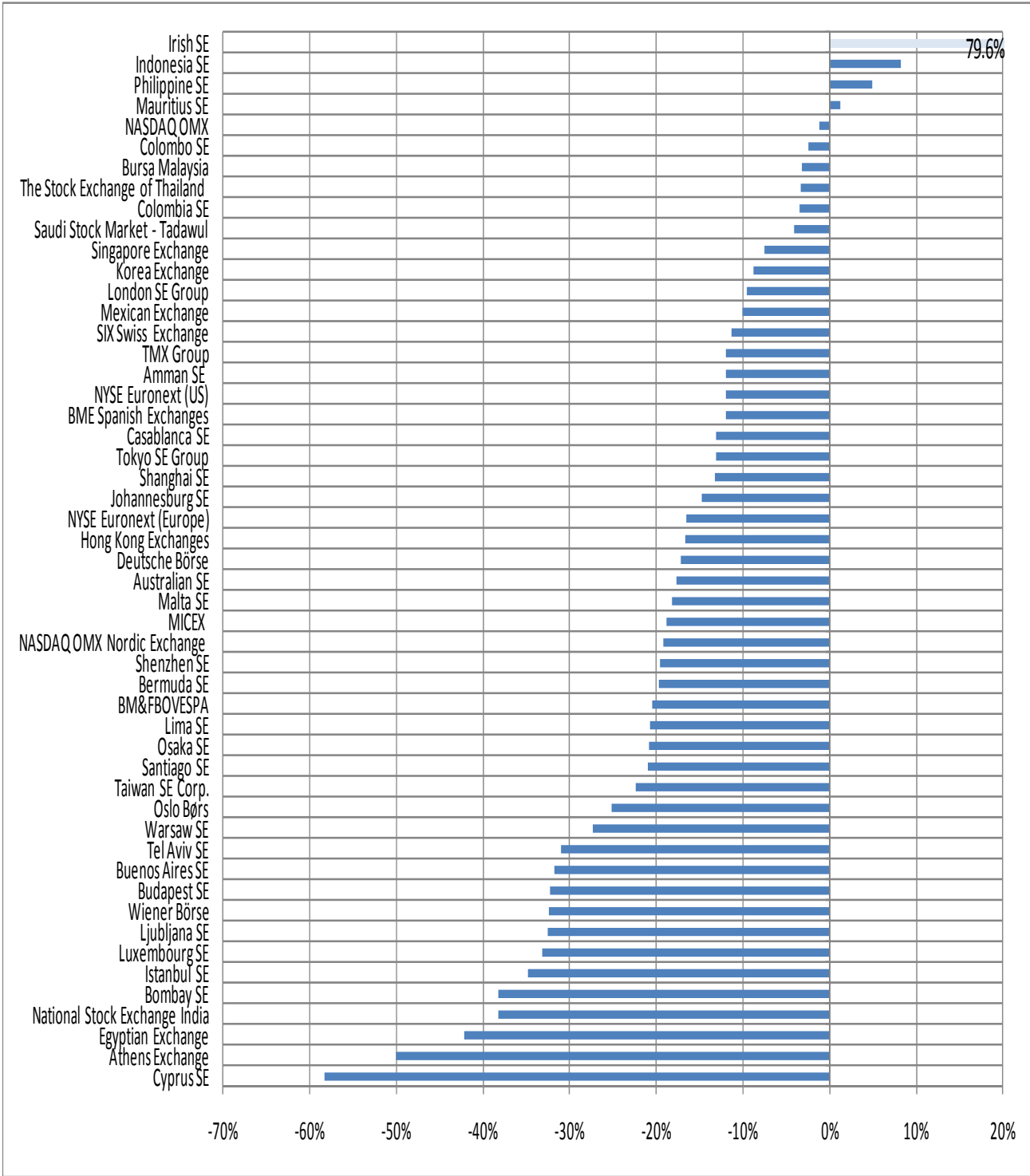
WFE total (USD tn)	30.9	26.5	22.8	30.6	36.8	40.8	50.6	60.8	32.5	47.7	54.8	47.4
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Notes : WFE membership has increased over the decade. Historical series were not adjusted.

◆ Zoom on 2011 - Monthly evolution of domestic equity market capitalization by time zones in USD trillion



Variations in 2011 domestic market capitalization by member – in USD  
(comparison of end-December 2011 with end-December 2010)



Note for Irish Stock Exchange:

The market capitalisation of a single stock (Allied Irish Banks Plc) has risen considerably as a result of the issuance of 500 billion shares to the National Pensions Reserve Fund Commission. Free float market capitalisation used for ISEQ Index calculation purposes has remained relatively stable.





## 2. Share trading value

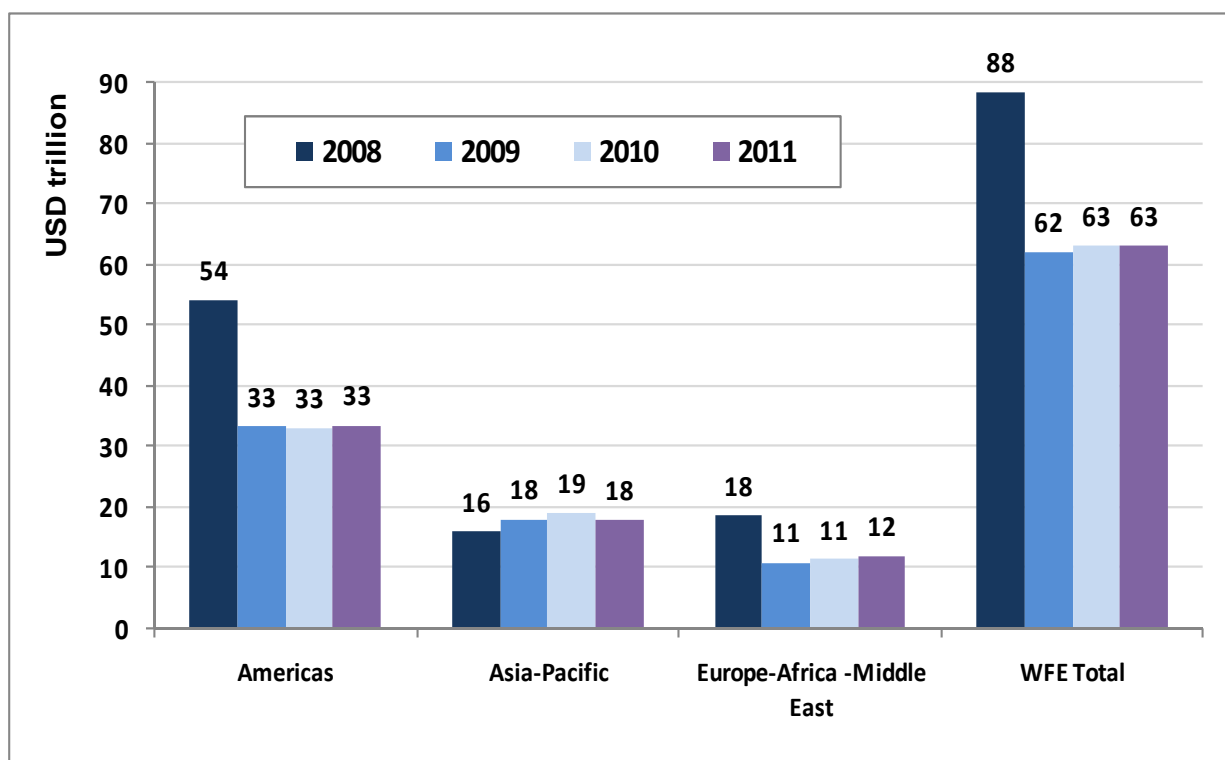
- ◆ Regional and total WFE Electronic order book share trading value performances in 2011 compared with 2010

Time zone	USD bn	USD bn	% change
	Jan-Dec 2011	Jan-Dec 2010	in USD
Americas	33 447	32 903	1.7%
Asia-Pacific	17 740	18 912	-6.2%
Europe Africa Middle East	11 799	11 265	4.6%
<b>Total WFE</b>	<b>62 986</b>	<b>63 080</b>	<b>-0.1%</b>

- ◆ Largest exchanges by value of share trading in the Electronic order book in 2011 and 2010

	Exchange	USD bn	USD bn	% change	% change
		2011	2010	In USD	in local currency
1	NYSE Euronext US	18 027	17 796	1.3%	1.3%
2	NASDAQ OMX US	12 724	12 659	0.5%	0.5%
3	Tokyo Stock Exchange Group	3 972	3 788	4.9%	-4.2%
4	Shanghai Stock Exchange	3 658	4 496	-18.6%	-22.0%
5	Shenzhen Stock Exchange	2 838	3 573	-20.6%	-23.9%
6	London Stock Exchange Group	2 837	2 741	3.5%	-3.0%
7	NYSE Euronext Europe	2 134	2 018	5.8%	-0.8%
8	Korea Exchange	2 029	1 607	26.2%	20.1%
9	Deutsche Börse	1 758	1 628	8.0%	1.2%
10	TMX Group	1 542	1 369	12.7%	7.4%

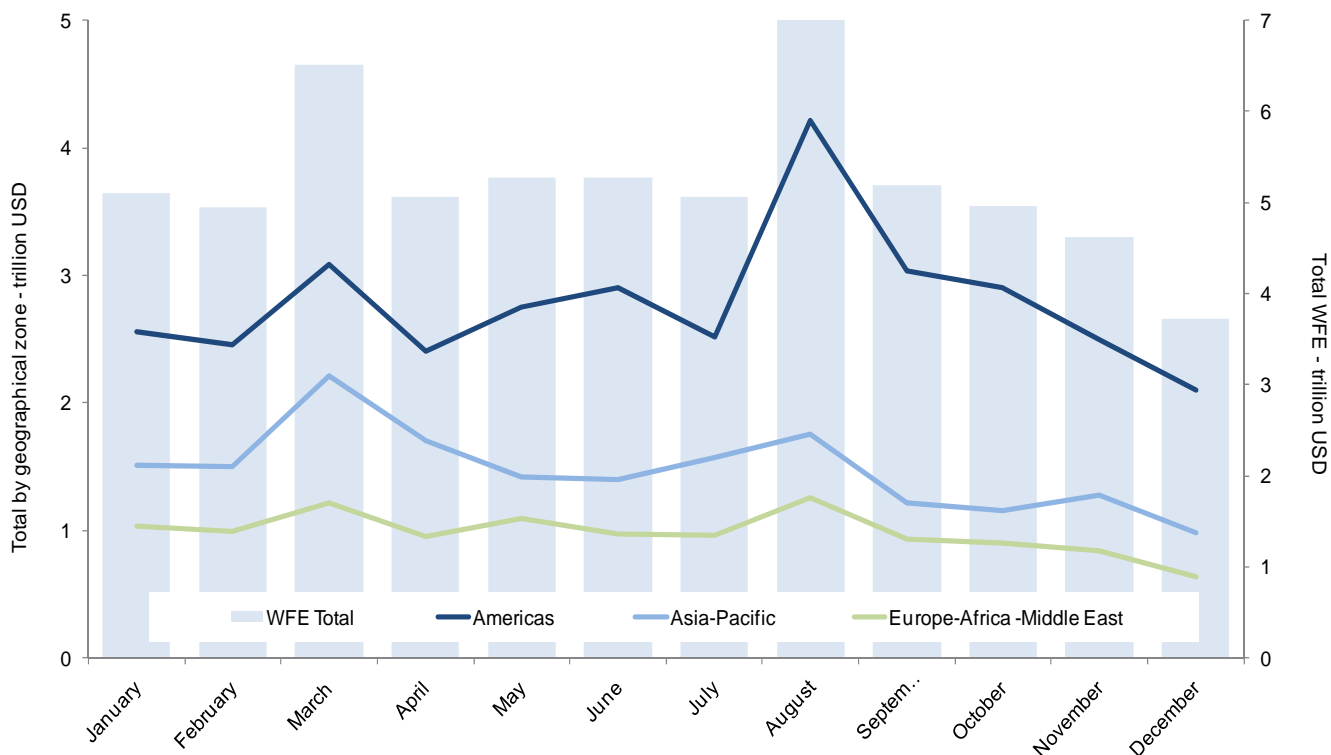
◆ Recent evolution of Electronic order book share trading value by time zones in USD trillion



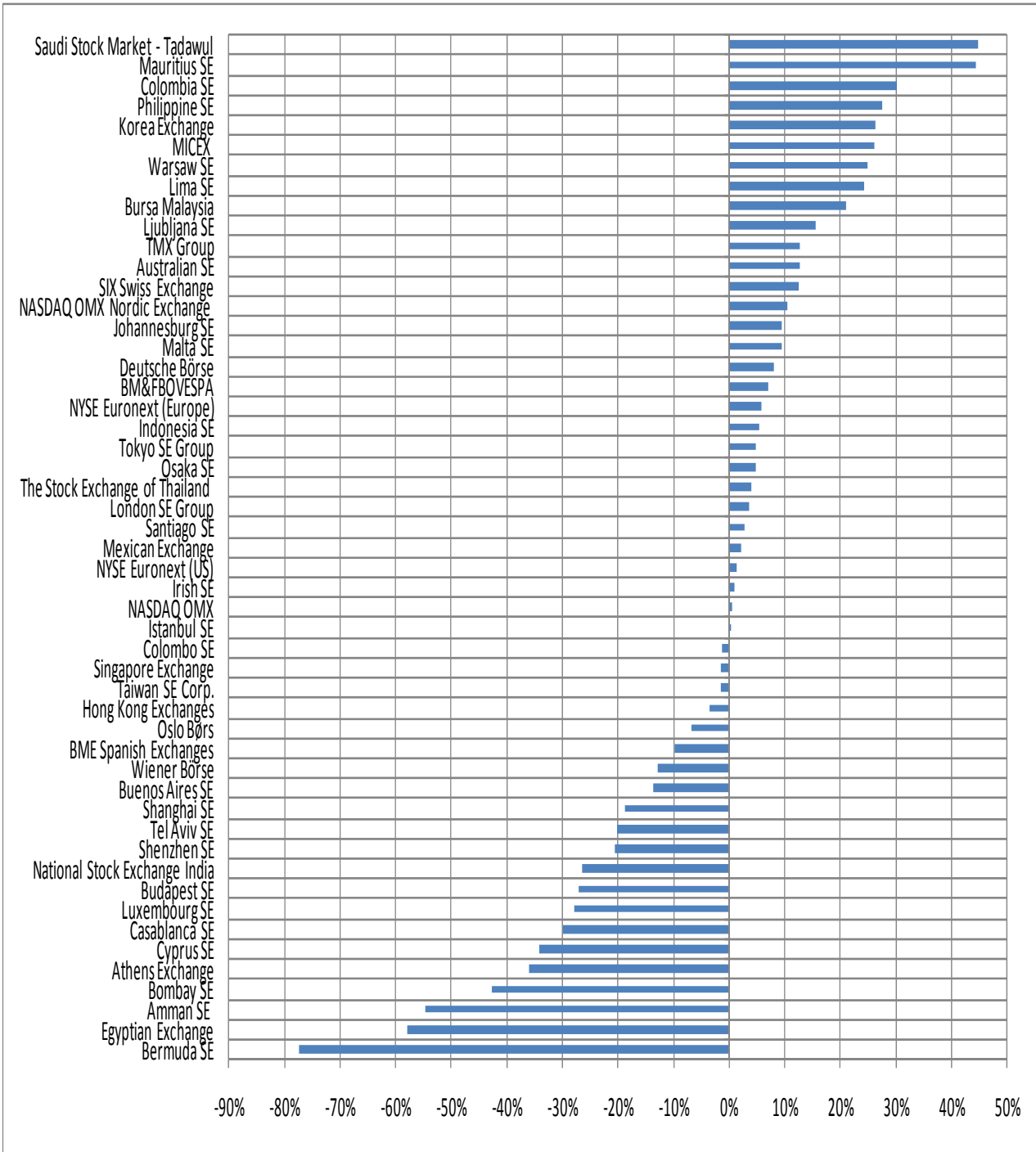
Note:

NYSE Euronext (US) and NASDAQ OMX (US) started to provide separate electronic order book data for share trading value in 2008 only. Previous years data are not comparable.

◆ Zoom on 2011 - Monthly evolution of electronic order book share trading value by time zone in USD trillion



Variations in 2011 Electronic order book share trading value by member – in USD  
(comparison of the period January - December 2011 with the same period of 2010)



3. **Broad equity market index performances among WFE members**  
 ◆ Top 10 performing broad market indexes last year, in local currency terms

	Exchange	% change 2011 / 2010
1.	Philippine Stock Exchange	4.1%
2.	Indonesia Exchange	3.2%
3.	NASDAQ OMX Nordic Iceland	2.0%
4.	Bursa Malaysia	1.1%
5.	Irish Stock Exchange	0.6%
6.	Johannesburg Stock Exchange	-0.4%
7.	Stock Exchange of Thailand	-0.7%
8.	NASDAQ OMX US	-1.8%
9.	Mexican Exchange	-2.7%
10.	Saudi Stock Market - Tadawul	-3.1%

**Broad equity market index performances by time zone**

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

	Americas	% change 2011 / 2010
1.	NASDAQ OMX US	-1.8%
2.	Mexican Exchange	-2.7%
3.	NYSE Euronext US	-6.1%
4.	Bermuda Stock Exchange	-8.6%
5.	TMX Group	-11.1%

	Asia / Pacific	% change 2011 / 2010
1.	Philippine Stock Exchange	4.1%
2.	Indonesia Exchange	3.2%
3.	Bursa Malaysia	1.1%
4.	Stock Exchange of Thailand	-0.7%
5.	Colombo Stock Exchange	-8.5%

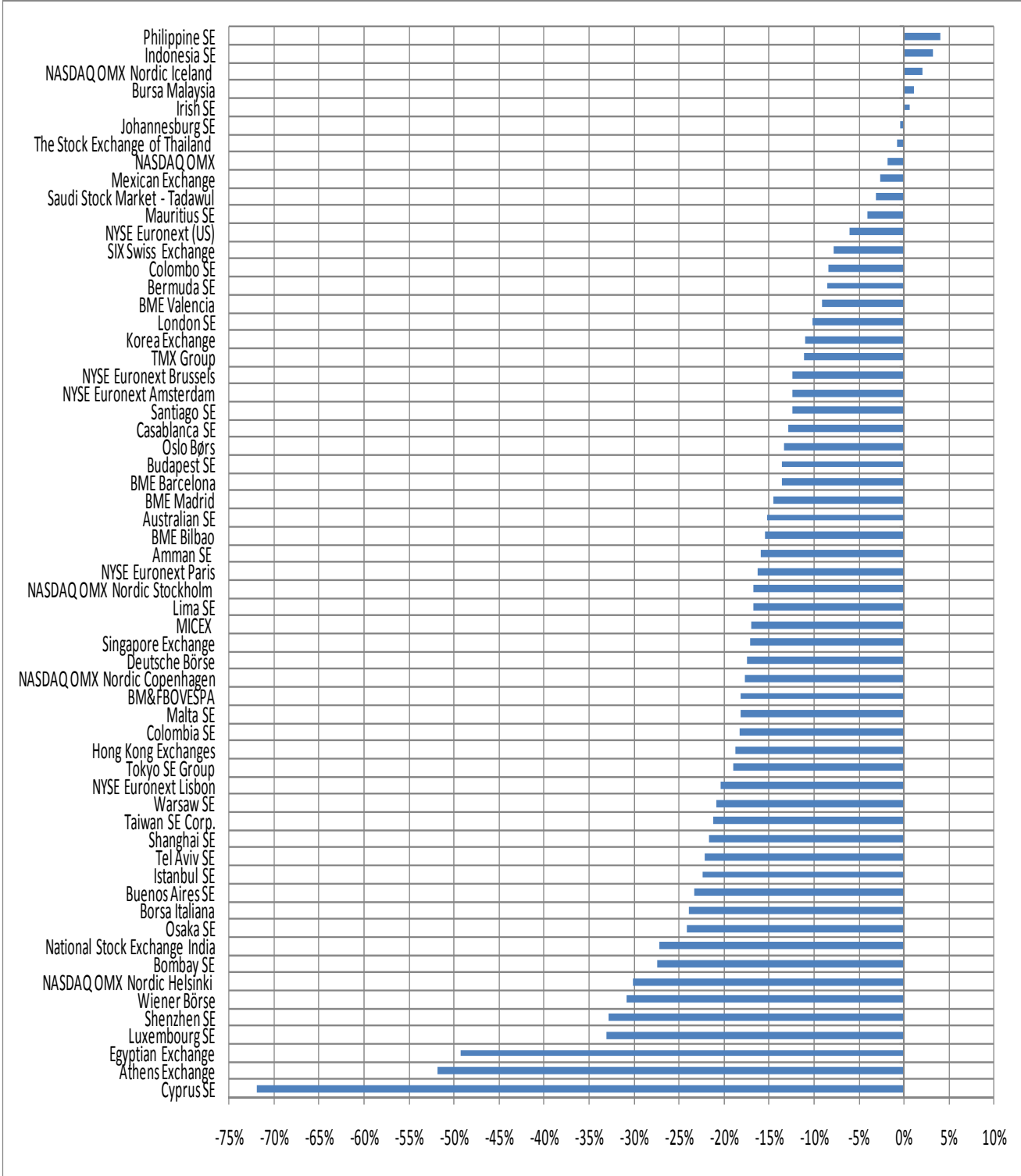
	Europe/Africa/Middle East	% change 2011 / 2010
1.	NASDAQ OMX Nordic Iceland	2.0%
2.	Irish Stock Exchange	0.6%
3.	Johannesburg Stock Exchange	-0.4%
4.	Saudi Stock Market - Tadawul	-3.1%
5.	Mauritius Stock Exchange	-4.0%

◆ Index performance gains by time zones

WFE member exchange broad equity market indexes, weighted by market capitalization decreased by 11.9% on average in local currency in 2011 compared to 2010, and by 13.6% on average in US dollar terms.

Time zone	Average performance in 2011 v. 2010 in local currency	Average performance in 2011 v. 2010 in USD
Americas	-6.7%	-6.2%
Asia-Pacific	-13.1%	-20.1%
Europe/Africa/Middle East	-18.4%	-17.8%
<b>WFE Average</b>	<b>-11.9%</b>	<b>-13.6%</b>

Variations in 2011 broad market indexes – in local currency terms  
(comparison of end-December 2011 with end-December 2010)



#### 4. Value of bond trading

- ◆ Regional and total WFE bond trading value performances in 2011 compared to 2010

Time zone	USD bn	USD bn	% change
	Jan-Dec 2011	Jan-Dec 2010	in USD
Americas	1 183	1 351	-12.4%
Asia-Pacific	1 004	754	33.2%
Europe Africa Middle East	30 369	21 916	38.6%
<b>Total WFE</b>	<b>32 556</b>	<b>24 021</b>	<b>35.5%</b>

- ◆ Largest exchanges by total value of bonds traded, in 2011 in USD terms

	Exchange	USD bn	USD bn	% change in USD	% change in local currency
		2011	2010		
1.	BME Spanish Exchanges	17 412	11 041	57.7%	48.6%
2.	London Stock Exchange Group	5 394	4 029	33.9%	26.4%
3.	Johannesburg Stock Exchange	2 898	2 321	24.9%	23.7%
4.	NASDAQ OMX Nordic Exchange	2 674	2 626	1.8%	-2.7%
5.	Colombia Stock Exchange	915	1 138	-19.6%	-21.7%
6.	Korea Exchange	747	506	47.7%	40.9%
7.	Oslo Bors	590	554	6.6%	-2.4%
8.	Istanbul Stock Exchange	518	446	16.2%	27.9%
9.	MICEX	301	233	29.3%	23.7%
10.	Tel Aviv Stock Exchange	246	203	21.2%	16.6%

#### 6. Securitized derivatives : number of listings and turnover by region in 2011 & 2010

Time zone	Number of listings at end 2011	Number of listings at end 2010	Turnover (USD bn) 2011	Turnover (USD bn) 2010	% change
Americas	156	179	1.1	1.4	-21.4%
Asia Pacific	24 026	23 774	887	915	-3.1%
Europe Africa Middle East	1 062 773	693 644	262	212	23.6%
<b>Total WFE</b>	<b>1 086 955</b>	<b>717 597</b>	<b>1150</b>	<b>1 128</b>	<b>2.0%</b>

◆ Top 5 exchanges by value of securitized derivatives traded in USD terms in 2011

	Exchange	USD bn in 2011	USD bn in 2010	% change
1.	Hong Kong Exchanges	576	534	7.8%
2.	Korea Exchange	289	354	-18.4%
3.	Deutsche Börse	96	80	20.0%
4.	SIX Swiss Exchange	59	38	55.3%
5.	NYSE Euronext (Europe)	43	35	22.8%

7. ETFs : number of listings and turnover by region in 2011 & 2010

Time zone	Number of listings at end 2011	Number of listings at end 2010	Turnover (USD bn) 2011	Turnover (USD bn) 2010	% change
Americas	2 269	1 806	9 019	8 609	4.8%
Asia Pacific	587	451	335	263	27.4%
Europe Africa Middle East	4 053	3 308	996	753	32.3%
<b>Total WFE</b>	<b>6 909</b>	<b>5 565</b>	<b>10 350</b>	<b>9 625</b>	<b>7.5%</b>

◆ Top 5 exchanges by value of ETFs traded in USD terms in 2011

	Exchange	USD bn in 2011	USD bn in 2010	% change
1.	NYSE Euronext US	4 496	4 164	8.0%
2.	NASDAQ OMX US	4 309	4 246	1.5%
3.	London Stock Exchange Group	314	243	29.2%
4.	Deutsche Börse	307	225	36.4%
5.	NYSE Euronext (Europe)	198	155	27.7%



## 8. Derivatives markets

- ◆ Derivatives market performances by number of contracts traded and by product in 2011

Product	Millions of contracts traded in 2011	2011/2010 growth rate
Single stock options (1)	3 930	-0.5%
Single stock futures	751	-4.4%
Stock index options (1)	5 767	14.5%
Stock index futures	2 036	8.2%
ETF options (1)	1 661	32.9%
<b>Total equity derivatives (1)</b>	<b>14 145</b>	<b>9.4%</b>
Interest rate options	653	1.4%
Interest rate futures	2 576	7.9%
<b>Total interest rate derivatives</b>	<b>3 230</b>	<b>6.6%</b>
Commodity options	152	NA
Commodity futures	971	NA
<b>Total commodity derivatives</b>	<b>1 123</b>	<b>NA</b>

(1) Growth rates are calculated without NYSE Euronext US volumes.

The size of stock options traded on ASX changed in 2011, the figures were rebased for the calculation of the growth rate.

Commodity derivatives were introduced in the statistics in 2011 – Currency derivatives will be introduced in 2012

- ◆ Top 5 exchanges by number of equity derivatives traded in 2011

### Single Stock Options

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	BM&FBOVESPA	838	4.5%
2	NASDAQ OMX US	701	9.6%
3	NYSE Euronext US	634	NA
4	Chicago Board Options Exchange	516	-9.9%
5	International Securities Exchange	454	-3.5%

### Single Stock Futures

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	NYSE Liffe Europe	250	-14.0%
2	EUREX	174	15.6%
3	National Stock Exchange India	161	-8.4%
4	Korea Exchange	60	34.1%
5	Johannesburg Stock Exchange	48	-39.1%

### Stock Index Options

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	Korea Exchange	3 672	4.1%
2	National Stock Exchange India	871	64.4%
3	EUREX	468	36.6%
4	Chicago Board Options Exchange	320	18.7%
5	TAIFEX	126	30.1%

### Stock Index Futures

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	CME Group	736	5.9%
2	EUREX	486	19.3%
3	National Stock Exchange India	156	-0.4%
4	Osaka Securities Exchange	137	-5.7%
5	NYSE Liffe Europe	97	3.1%

### ETF Options

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	NYSE Euronext US	476	NA
2	NASDAQ OMX US	471	36.0%
3	Chicago Board Options Exchange	368	33.3%
4	International Securities Exchange	339	28.9%
5	Bourse de Montréal (1)	4	NA

### Total Equity Derivatives

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	Korea Exchange	3 819	4.4%
2	EUREX	1 404	18.5%
3	National Stock Exchange India	1 221	37.1%
4	Chicago Board Options Exchange	1 205	7.7%
5	NASDAQ OMX US	1 177	19.0%

(1) From January to November 2011

◆ Top 5 exchanges by number of interest rate derivatives traded in 2011

**Interest Rate Options**

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	CME Group	273	1.6%
2	NYSE Liffe Europe	174	-7.9%
3	BM&FBOVESPA (1)	104	NA
4	EUREX	81	24.2%
5	NYSE Euronext US	15	NA

(1) From January to October 2011

**Interest Rate Futures**

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	CME Group	1 246	12.2%
2	EUREX	549	7.8%
3	NYSE Liffe Europe	371	-6.9%
4	BM&FBOVESPA (1)	287	NA
5	MEXDER	38	8.5%

(1) From January to October 2011

**Total Interest Rate Derivatives**

	Exchange	Millions of contracts traded in 2011	2011/2010 growth rate
1	CME Group	1 519	10.2%
2	EUREX	630	9.7%
3	NYSE Liffe Europe	545	-7.3%
4	BM&FBOVESPA (1)	391	NA
5	MEXDER	38	8.5%

(1) From January to October 2011