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EQUITY MARKETS IN THE CEE REGION AGAINST THE LARGEST GLOBAL STOCK EXCHANGES

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The functioning of stock exchanges in the CEE countries is taking place from a relatively short period of time. While in the Western, developed countries some stock markets have already been established in the seventeenth century, in the CEE countries this process was possible only after the political transformation in the early 90s of the twentieth century.

The oldest stock exchange in the CEE region are exchanges in Ljubljana (1989) and Budapest (1990). In 1991 stock exchanges in: Warsaw, Budapest, Bucharest, Bratislava and Zagreb have been formed. In 1993 Prague and Vilnius Stock Exchange have begun to operate and the youngest among the stock exchanges of the CEE region are capital markets in Tallinn and Riga. Both were founded in 1996. However the world's oldest stock exchanges include securities markets in Amsterdam (founded in 1602), Paris (1724), Lisbon (1769), Brussels (1801), London (1801), Milan (1808), New York (1817) and Madrid (1831).

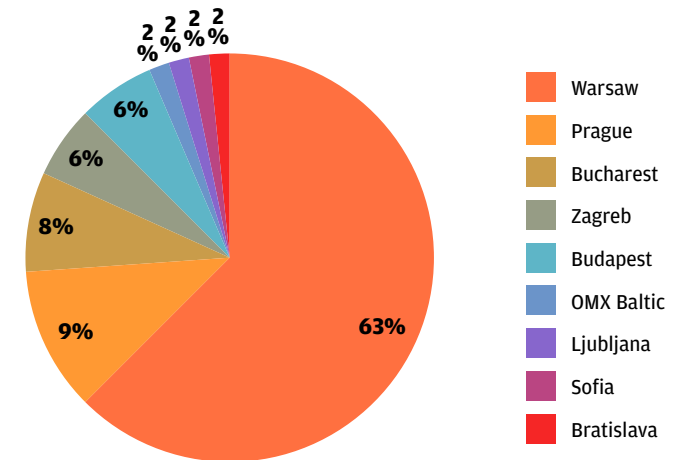
In the global financial markets intense stock exchange consolidation processes take place. In 2000 European consortium of stock exchanges Euronext has been established, which consists of securities markets in: Brussels, Amsterdam, Paris and Lisbon. In 2002, a consortium has been joined by the London International Financial Futures and Options Exchange (LIFFE). In 2007, American New York Stock Exchange (NYSE) and the European consortium Euronext merged, which enabled the creation of a global securities trading platform called NYSE Euronext. Economic analyzes are often separated on the American part NYSE Euronext (USA) and European NYSE Euronext (Europe). The second cross-country stock market is the consortium called NASDAQ OMX, which owns American alternative stock market, NASDAQ and OMX Group. OMX Group was formed in 2007. It owns and manages currently eight stock exchanges in the following countries: Nordic (known as NASDAQ OMX Nordic, which owns exchanges in Copenhagen, Stockholm, Helsinki and Reykjavik), the Baltic (called NASDAQ OMX Baltic securities markets including: Vilnius, Riga and Tallinn) and Armenia (Yerevan). From CEE region only the Baltic states exchanges were incorporated into the ownership of foreign financial corporations. Other markets remain independent. However they are partly privatized.

The largest capital market in the CEE region is the Warsaw Stock Exchange (WSE), which total market capitalization (primary and alternative market NewConnect as well) at the end of December 2013 amounted to nearly 149 billion EUR. The Warsaw Stock Exchange is the clear leader in the CEE region. Second largest securities market based on the capitalization of all listed companies is the Prague Stock Exchange with a total value of almost 22 billion EUR. This means that in terms of capitalization of all listed enterprises WSE is 7-fold larger than the stock exchange in Prague.

Stock Exchange	Capitalization* (mln EUR)
Warsaw	148,678
Prague	21,990
Bucharest	17,800
Zagreb	15,467
Budapest	14,355
OMX Baltic	5,731
Ljubljana	5,173
Sofia	5,092
Bratislava	4,075
Total CEE	238,361

*Refers to the value of companies at the end of December 2013
 Source: Own work based on data derived from the Federation of European Securities Exchanges

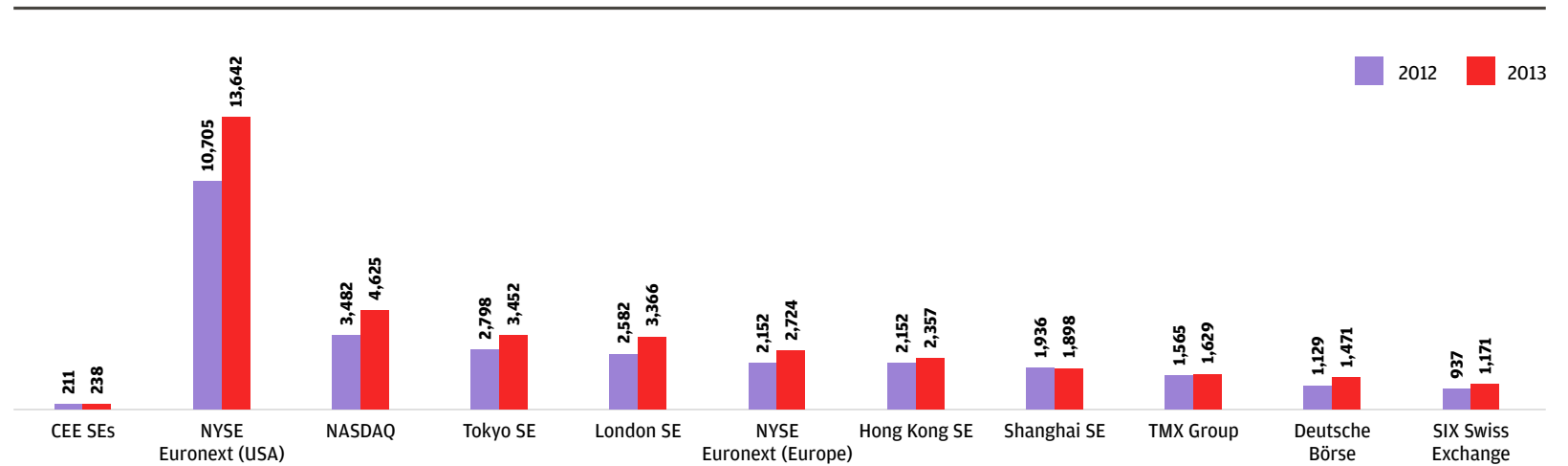
Breakdown of CEE stock exchanges' total capitalization



Source: Own work based on data from Federation of European Securities Exchanges

Although Warsaw Stock Exchange holds the status of a leader in the CEE region it should be noted that comparing it with the capitalization of largest global stock markets Warsaw Stock Exchange does not belong to the leading ones. The largest capital market in terms of total capitalization is American NYSE Euronext (USA). The value of all companies listed there amounted in 2013 to 13.6 trillion EUR.

Capitalization of CEE's stock exchanges vs. world (bln EUR, 2012)



Source: Own work based on data derived from the Federation of European Securities Exchanges

The second largest stock exchange is NASDAQ (4.6 trillion EUR), then Tokyo Stock Exchange (3.5 billion EUR) and London (3.4 trillion EUR). Among the 10 largest financial markets 9 exchanges come from highly industrialized countries. The total capitalization of all CEE stock exchanges amounted in 2013 to 238 billion EUR, what was 57 times lower than the capitalization value of NYSE Euronext and 19 times lower than NASDAQ.

In 2013 (compared with 2012) nine of the ten largest global stock markets increased their market capitalization. The average growth value was 21% (the highest in case of NASDAQ - 33%, the smallest: TMX Group¹ - 4%). The only stock market that recorded decline in total capitalization was Shanghai (down 2%). CEE Stock Exchange in 5 cases reported decrease in the total capitalization. The biggest took place in the case of the Bucharest Stock Exchange (47%) and the lowest in Sofia (1.3%). Four markets decreased their market capitalization. The Prague Stock Exchange had lost most (22%), at least decrease recorded Bratislava Stock Exchange (0.4%).

In terms of value of share trading (annual turnover by the Electric Order Book) Warsaw Stock Exchange holds a dominant position in the CEE region ahead of the stock exchange in Budapest and Prague. In 2013 the Electronic Order Book (EOB) trades amounted in case of Warsaw Stock Exchange to almost 53 billion EUR, while the second in the region, Hungarian Stock Exchange recorded a share trading value of almost 8 billion EUR.

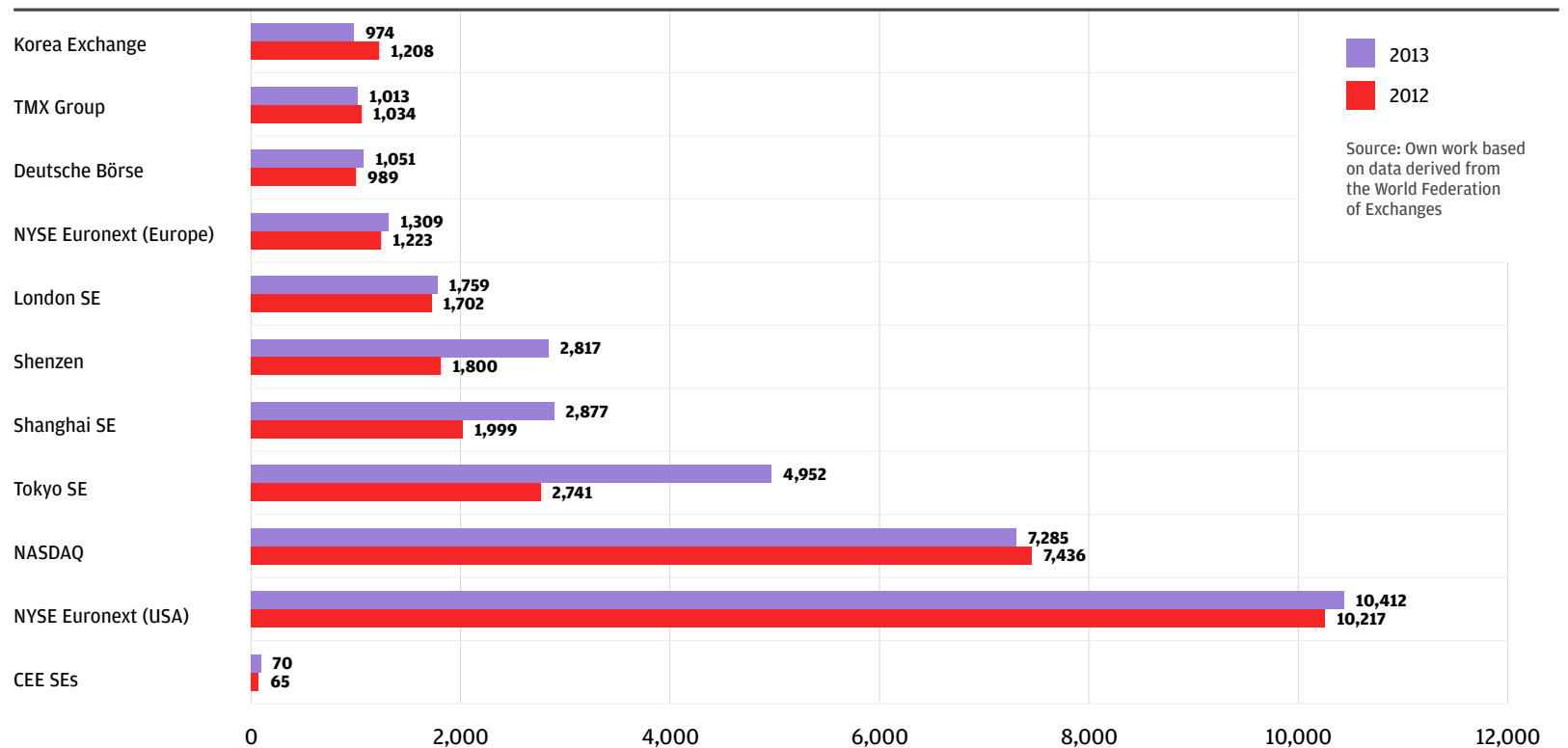
Stock Exchange	Annual value of share trading* (EOB, mln EUR)
GPW Warsaw	52,629
Budapest	7,830
Prague	6,724
Bucharest	1,165
Sofia	657
Zagreb	398
OMX Baltic	302
Ljubljana	299
Bratislava	39
Total CEE	70,043

*Refers to the whole 2013
Source: Own work based on data derived from the Federation of European Securities Exchanges

¹ TMX Group is Canadian consortium of stock exchanges governing capital markets in Toronto (Toronto Stock Exchange), Calgary (TSX Venture Exchange), Montreal (Montreal Exchange) and Natural Gas Exchange and the Boston Options Exchange.

Comparing major capital markets of the world in terms of the value of share trading there can be seen even greater distance between them and CEE countries. In 2013 the value of share trading of all stock markets of the CEE region were 148-fold lower than of the highest worldwide, NYSE Euronext (USA). Annual turnover on the Warsaw Stock Exchange itself was 200-fold lower than on the NYSE Euronext and 140-fold then on the second largest, NASDAQ.

Annual value of share trading (EOB, bln EUR)



In most of the world's 10 largest stock markets in terms of share trading an increase was recorded in 2013 compared to 2012 (the largest in case of the Tokyo Stock Exchange - 81%, the smallest by the NYSE Euronext - 2%). Only the NASDAQ Stock Exchange and TMX Group recorded a decrease in turnover on an annual basis (in both by cases, 2%). Meanwhile, in case of CEE capital markets four of them reported an increase in turnover (the largest in Sofia stock exchange - 139%, while the lowest in case of the Baltic stock exchanges - 7%). In the remaining five cases there was a decrease in turnover on an annual basis (the largest in Prague - 33%, the lowest in Ljubljana - 1.5%).

STOCK EXCHANGE	NUMBER OF LISTED COMPANIES*		
	Domestic	Foreign	Total
Warsaw	869	26	895
Sofia	381	0	381
Zagreb	368	0	368
Bratislava	130	1	131
Bucharest	81	2	83
OMX Baltic	79	na	79
Ljubljana	55	0	55
Budapest	50	0	50
Prague	15	11	26

*Applies to the primary market and alternative markets
 Source: Own work based on data derived from the Federation of European Securities Exchanges

CEE stock exchanges differ significantly from each other not only in terms of capitalization and value of share trading but also by the number of listed companies. On the Warsaw Stock Exchange there are in total 869 companies listed, what makes WSE again the largest in the region, before the Bulgarian (381 companies) and Croatian Stock Exchange (268 companies).

Comparing the number of listed companies on the CEE stock exchanges with the world`s largest financial markets CEE securities markets still have a lot to do catching up. biggest number of the enterprises records Mumbai Stock Exchange, where total of 5,277 companies are listed, before the Canadian (3,836 companies) and the Tokyo Stock Exchange (3,401 companies). The two world's largest stock exchanges in terms of total capitalization, NYSE Euronext and NASDAQ are places for 2,356 and 2,616 enterprises respectively.

STOCK EXCHANGE	NUMBER OF LISTED COMPANIES*		
	Domestic	Foreign	Total
BSE India	5,277	na	5,277
TMX Group	3,758	78	3,836
Japan Exchange Group - Tokyo	3,390	11	3,401
BME Spanish Group	3,217	32	3,249
London SE Group	2,746	na	2,746
NASDAQ	2,321	295	2,616
NYSE Euronext	1,842	514	2,356
Australian SE	1,927	106	2,033
Korea Exchange	1,763	15	1,778
National Stock Exchange India	1,673	1	1,674

*Refers to the value of companies at the end of December 2013
Source: Own work based on data derived from the World Federation of Exchanges

On the largest capital markets in the world foreign companies are often listed. The highest level of internationalization (measured by the quotient of the number of foreign companies and the total number of listed companies) have following stock exchanges: NYSE Euronext USA (22%), NASDAQ (11%) and Australian SE (5%). The most internationalized capital markets from the CEE region are the Prague (42%) and Warsaw Stock Exchange (3%). However the highest absolute number of foreign companies listed on the CEE stock exchanges appears to be in case of the Warsaw Stock Exchange (26).

The securities markets in the CEE region have in general quite low level of development in terms of the number of Initial Public Offerings (IPOs). Apart from the Warsaw capital market virtually there were almost no new listings on the stock exchanges from the CEE region in 2012 and 2013. In 2013 on the Warsaw Stock Exchange 58 IPOs took place while in 2012 almost twice more - 105. This result ranked WSE among the world leaders of capital markets in terms of global IPOs.

STOCK EXCHANGE	NEW COMPANIES LISTED (IPO)	
	2012	2013
GPW Warsaw	105	58
Prague	0	0
Budapest	0	1
Bucharest	0	1
Ljubljana	0	0
Sofia	1	0
Bratislava	0	0
Zagreb	0	3
OMX Baltic	na	na

Source: Own work based on data derived from the Federation of European Securities Exchanges

On the world's largest stock exchanges there was a variable dynamics of the number of companies making their debut during 2012 and 2013. Exchanges being chosen by investors for raising capital most frequently were in 2012 securities markets in London (159 companies) and the Canadian TMX Group (154 subjects). On the largest stock market in terms of capitalization, NYSE Euronext (USA) 79 companies went public in 2012, while in 2013 - 123.

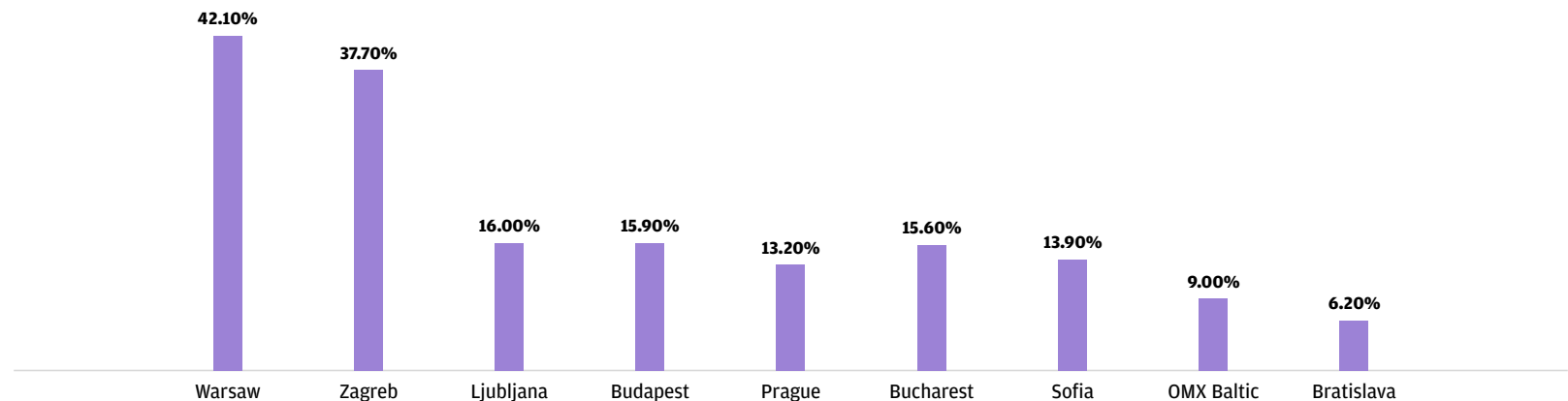
STOCK EXCHANGE	NEW COMPANIES LISTED (IPO)	
	2012	2013
NYSE Euronext (USA)	79	123
NASDAQ	75	116
Tokyo Stock Exchange	29	47
London Stock Exchange	159	121
NYSE Euronext (Europe)	17	30
Hong Kong	60	97
Shanghai	25	0
TMX Group	154	96
Deutsche Börse	11	7
SIX	3	1

Source: Own work based on data derived from the World Federation of Exchanges

Alternative trading market, NASDAQ also recorded a considerable interest from potential companies looking to seek financing through stock exchange. During 2012 and 2013 total of 191 enterprises went public (in 2012 - 75, in 2013 - 116). Relatively low growth rate of the number of listed companies showed exchanges in Switzerland (total of 4 IPOs during 2012 and 2013) and German (18 IPOs).

One of the primary functions of the securities market is to provide capital to boost the economy. Despite the relatively short period of operation some of the CEE exchanges play an important role in supporting the economy. The best indicators of market capitalization to GDP (MC/GDP) perform stock exchanges in: Warsaw (42.1%) and Zagreb (37.7%). In other CEE countries, domestic securities markets do not play such an important role.

Market capitalization to GDP (% , 2013)



Source: Own work based on data derived from the Federation of European Securities Exchanges

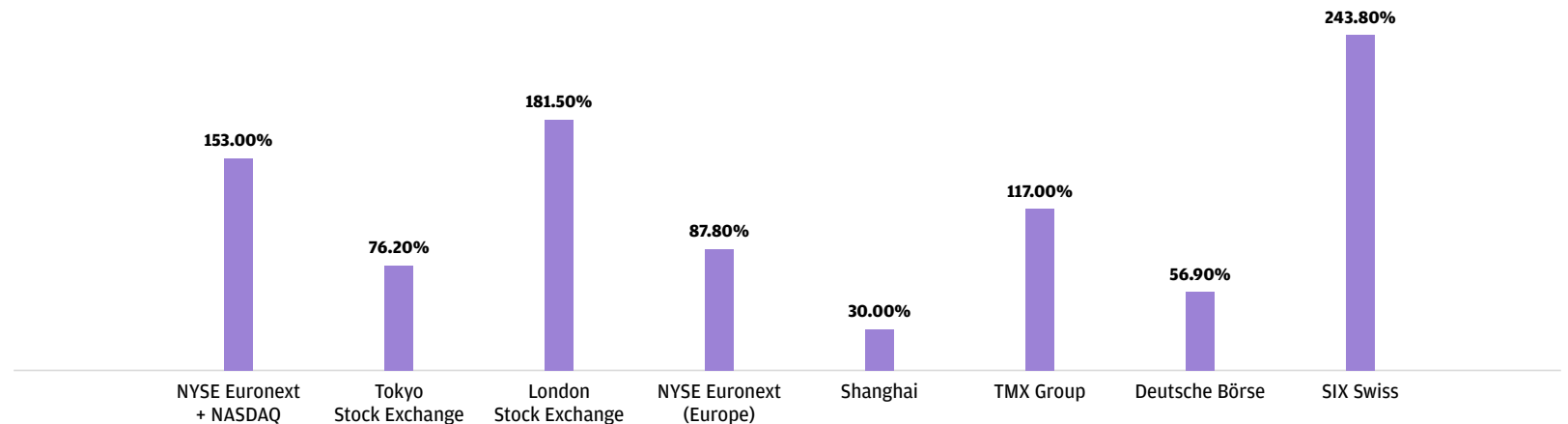
Relatively lowest importance for the economy is recorded in terms of the stock exchange in Bratislava and the Baltic States. In 2013 MC/GDP index was 6.2% and 9% respectively.

In developed countries total market capitalization to GDP ratios are much higher. The highest rate indicates Hong Kong stock exchange (1,173%). This value is clearly different from the other and results from the country's size, legal environment and proximity of the business of China (many Chinese companies decide to choose not a national stock exchange in Beijing or Shanghai but the stock exchange in Hong Kong).

Apart from the above-average rate of MC/GDP for Hong Kong, in other cases a key role in the economy perform following exchanges: SIX (243.8%), London (181.5%), NYSE Euronext and NASDAQ (153%) and Canadian (117%). For all of these securities markets total capitalization of listed companies is larger than the annual value of GDP of these countries.

In summary, the securities markets in the CEE region in terms of most parameters (total capitalization, annual share trading, number of listed companies, the importance of the economy) cannot compare with the world's largest stock exchanges. Only in terms of IPOs one market of the CEE region, the Warsaw Stock Exchange for the years 2012 and 2013, is among the world's leaders, what to some extent is a good omen for the future. On the other hand, taking into account the internationalization among CEE markets noteworthy is the stock exchange in Prague and partly in Warsaw.

Market capitalization to GDP (% , 2013)



Notes: MC/GDP index for HK has been omitted Source: Own work based on data derived from the World Federation of Exchanges Source

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