HOW TO FIGURE OUT VN INDEX

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The stock index is derived from statistics to measure the increase or decline in prices of securities in a specific stock market, in a specific time as compared with the previous time.

The securities markets in the world have their own index, for example, Dow Jones in the U.S., TSE in Canada, All Ordinaries in Australia, Shanghai in China, HangSeng in HongKong, Nikkei 225 in Japan, JKSE in Indonesia, KLSE in Malaysia, PSE in the Philippines, Strait Times in Singapore, SET in Thailand, CAC 40 in France, DAX in Germany, Moscow Times in Russia, FTSE 100 in the U.K. and so on. The American Dow Jones index is the most outstanding, oldest and established by Charles Henry Dow in 1884. Mr. Dow is considered as the father of the technical analysis because the stock markets are sometimes bull or bear markets. Mr. Dow along with Dow Jones Company published The Wall Street Journal showing daily closing prices of some major stocks, averaging them and fixing indexes. At present, the Dow Jones include DJIA (Dow Jones Industrial Averages), DJTA (Dow Jones Transportation Averages), DJUA (Dow Jones Utilities Averages), the 65 Dow Jones Composite...

The Vietnamese Securities Exchange's index is VN Index. It is established as followed:

For example, results of the first trading session are as follows:

Company	Share	Execution prices	Number of shares	Market value
Refrigeration Electrical Engineering	REE	VND16,000	15 mil.	VND240,000 million
Cables and Telecoms Materials	SAM	VND17,000	17 mil.	VND204,000 milllion

$$\text{VNindex} = \frac{\sum P1i \times Q1i}{\sum P0i \times Q0i} \times 100$$

(1) Total market value at the time of calculation)/P0ia x Q0i

(2) Total market value at the base time

P1i: the traded price of the Company I's share

Q1i, Q0i: the volume of the Company's shares

P0i: the price of the Company I's share at the base time

$$\text{VN Index} = \frac{(16{,}000 \cdot 15 \text{ mil.}) + (17{,}000 \cdot 12 \text{ mil.})}{(16{,}000 \cdot 15 \text{ mil.}) + (17{,}000 \cdot 12 \text{ mil.})} \times 100 = 100 \text{ points}$$

At the second trading session on July 31, 2000, the matching prices of REE and SAM are VND16,300 and VND17,200 respectively, thereby

$$\text{VN Index} = \frac{(16{,}300 \cdot 15 \text{ mil.}) + (17{,}200 \cdot 12 \text{ mil.})}{(16{,}000 \cdot 15 \text{ mil.}) + (17{,}000 \cdot 12 \text{ mil.})} \cdot 100 = \frac{450{,}900}{444{,}000} \times 100 = 101.55$$

The VN Index increases by 1.55 points or 1.55%

At the third trading session on August 2, 2000, the matching prices of REE and SAM are VND16,600 and VND17,500 respectively, thereby

$$\text{VN Index} = \frac{(16{,}600 \cdot 15 \text{ mil.}) + (17{,}500 \cdot 12 \text{ mil.})}{(16{,}000 \cdot 15 \text{ mil.}) + (17{,}000 \cdot 12 \text{ mil.})} \cdot 100 = \frac{459{,}000}{444{,}000} \times 100 = 103.38$$

The VN Index increases by 1.83 points

(103.38-101.55) or 1.8% (103.38/101.55) = $\frac{459{,}000}{450{,}900}$

At the fourth trading session on August 4, 2000, the matching prices of REE and SAM are VND16,900 and VND17,800 respectively and those of the two newcomers Hải Phòng Paper Company - HAP (1,008 million shares) and Transforwarding and Warehousing Corporation - TMS (2.2 million shares) are VND16,000 and VND14,000 respectively, thereby

$$\text{VN Index} = \frac{[(16{,}900 \cdot 15) + (17{,}800 \cdot 12) + (16{,}000 \cdot 1.008) + (14{,}000 \cdot 2.2)] \text{ mil.}}{d1} \cdot 100$$

d1 = Total market value of total shares / Total market value of older shares x d0

$$d1 = \frac{[(16{,}900 \cdot 15) + (17{,}800 \cdot 12) + (16{,}000 \cdot 1.008) + (14{,}000 \cdot 2.2)] \text{ mil.}}{[(16{,}900 \times 15) + (17{,}800 \times 12)] \text{ mil.}} \cdot 444{,}000$$

$$= \frac{514{,}028}{467{,}100} \times 444{,}000 = 488{,}602.22$$

$$\text{VN Index} = \frac{514{,}028}{488{,}602.22} \times 100 = \frac{467{,}100}{444{,}000} \times 100 = 105.2$$

The VN Index increases by 1.82 points (105.2 - 103.38), or up 1.76% (105.2/103.38) as compared with the previous trading session■