true friend KIS Viet Nam Securities Corporation

Economic Indicators

The Buffett Indicator

Undervalued or overvalued are financial term that refers to a security or other type of asset being sold in the market at a price considered to be lower or higher than the asset's true intrinsic value. Buying stocks when they are undervalued is a key component of famous investor Warren Buffett.

The Buffett Indicator overview

The Buffett indicator (or the Buffett metric, or the Market capitalization-to-GDP ratio) is a valuation multiple used to assess how expensive or cheap the aggregate stock market is at a given point in time. It used as a broad way of assessing whether the country's stock market is overvalued or undervalued, compared to a historical average.

Understanding of the Buffett Indicator

The Buffett indicator is one of the many sentiment indicators in the market today. Many long-term investors can use it to predict whether stocks are overvalued or not.

There are 3 level which show whether the stock is overvalued or under valued

55% to 60%: That means the stock are undervalued.

75%. Neither expensive nor cheap, this is considered as the historical average.

90-100%. This means the stock are overvalued, in these cases the stocks start to become expensive.

Final thought

The Buffett indicator used to be a relatively popular gauge of market sentiment. However, in the past few years, its efficiency has been relatively weak. Therefore, as a trader, you should only use it to gauge the market sentiment and not as a tool to find buy and sell opportunities.

Economic Indicators

28 Nov 2022

Contents

I. The Buffett Indicator overview 1
II. Understanding of the Buffett Indicator 2
III. How is the Buffett Indicator used? 5
IV. Final Thought 5

Latest economic indicators

The Michigan Consumer Sentiment (MCSI)	October 28 2022
The U.S Purchasing Manager's Index(PMI)	October 21 2022
The PCE and Michigan Inflation Expectation	September 29 2002
The Federal Fed Funds Rate	September 21 2022
The Philadelphia Manufacturing index	September 14 2022
The U.S CPI	September 9 2002
Unemployment Rate & Non-farm payroll	August 31 2022

Research Dept
researchdept@kisvn.vn

I. The Buffett Indicator overview

DEFINITION

- The Buffett indicator (or the Buffett metric, or the Market capitalization-to-GDP ratio) is a valuation multiple used to assess how expensive or cheap the aggregate stock market is at a given point in time. It was proposed as a metric by investor Warren Buffett in 2001, who called it "probably the best single measure of where valuations stand at any given moment", and its modern form compares the capitalization of the US Wilshire 5000 index to US GDP.
- It used as a broad way of assessing whether the country's stock market is overvalued or undervalued, compared to a historical average.
- In fact, in order for the Buffett index to reflect accurately, it seems correct to assume that all companies in the country are listed. This is because GDP is the sum of the output of all firms in a country. In other words, assuming that all companies are listed, it can be understood as comparing the market capitalization and GDP of the market.
- Warren Buffett once commented to Fortune Magazine that he believes the "Buffett Indictor" is "probably the best single measure of where valuations stand at any given moment."

WHY IT IS IMPORTANT

- This is a simple way of looking at the value of all stocks on an aggregate level, and comparing that value to the country's total output, which is its gross domestic product.
- Market participants will be keeping an eye on analysts' predictions of the data ahead of their release.

II. Understanding of the Buffett Indicator

The formula for the Buffett Indicator is

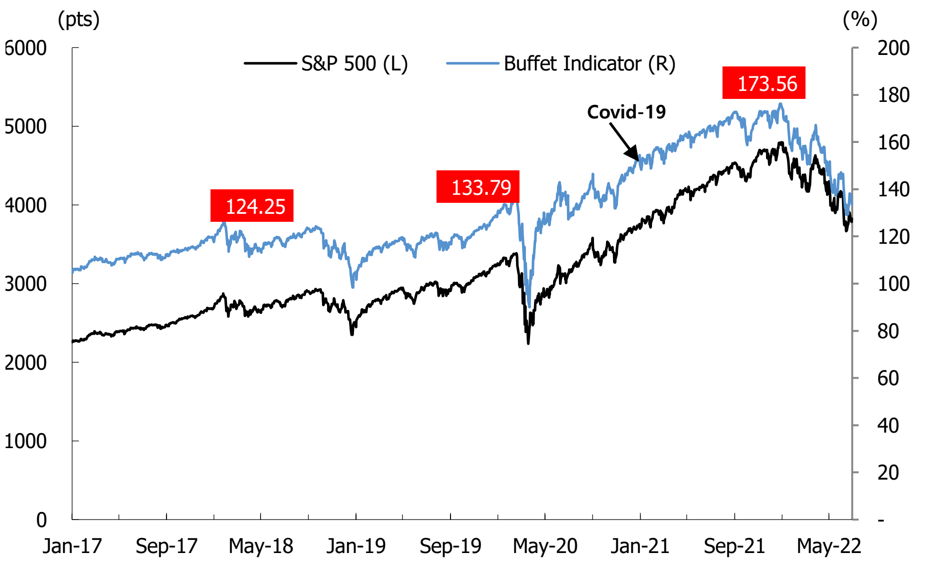
$$\frac{\boldsymbol{Wilshire\ \ 5000\ \ Capitalization}}{\boldsymbol{The\ \ U.S.\ \ \ GDP}}$$

- At its launch, Wilshire 5000 had 5,000 companies. However, the number of companies has been rising and falling since then. At its peak, the index had more than 7,500 companies. Today, the number has fallen to about 3,500 because of mergers and acquisition and delisting.

- When it was launched, all companies in the index were valued at more than USD1 trillion. Today, while the number of companies has fallen, the total value has surged to more than USD50 trillion. This is evidence that American companies are getting bigger over time.

- The GDP, on the other hand, refers to the total output of an economy. It looks at consumption, total government expenditure, investments and net exports minus net imports. The American GDP has been rising over the years. At the time of writing, it stands at more than USD21.4 trillion.

Figure 1. Buffett Indicator and The S&P 500 index



Source: Bloomberg, KIS

As can be observed that the Buffett indicator somehow gives us some information about the valuation of the stock price. The red-zone shows that stock price is now overvalued which means that we should consider disbursing money gradually or to sell stocks in order to minimize loss/ keep profit because at this time the stocks is quite expensive.

How to interpret the Buffet Indicator

- If the ratio is lower than the range from 60% to 55%: That means the stock are undervalued. The lower the percentage, the more undervalued they are.

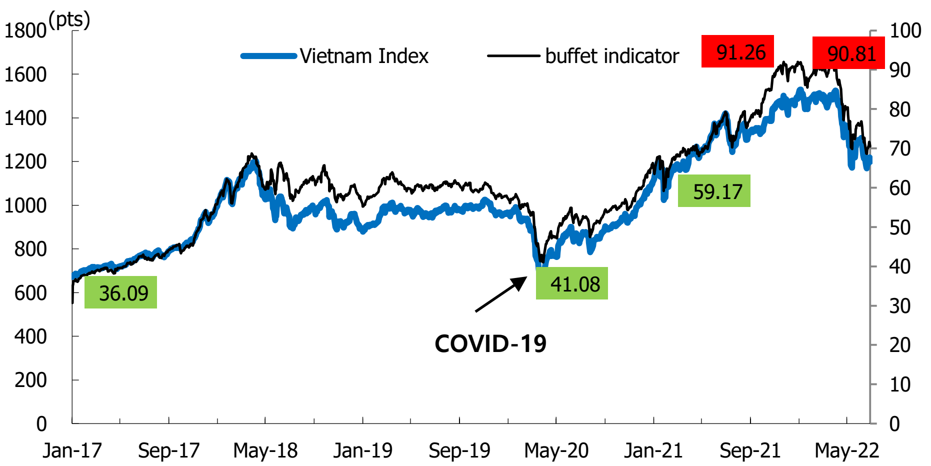
- If a rate is about 75%. Neither expensive nor cheap, this is considered as the historical average. The market will be quite balanced. If the environment is good, the stock is likely to go up in this scenario. On the other hand, if the environment becomes more extreme, lower prices will be possible.

- If a rate is greater than 90-100%. This means the stock are overvalued, in these cases the stocks start to become expensive. The higher the percentage, the more overvalued they are.

The application of Buffett Indicator in Vietnamese Market

For the Buffett index to reflect accurately, it seems correct to assume that all companies in the country are listed. This is because GDP is the sum of the output of all firms in a country. In other words, assuming that all companies are listed, it can be understood as comparing the market capitalization and GDP of the market. It is necessary to sum up market capitalization in three indexes such as HOSE, HNX, and UPCOM together for a comprehensive overview.

Figure 2. Buffett Indicator and Vietnam Index from 2017

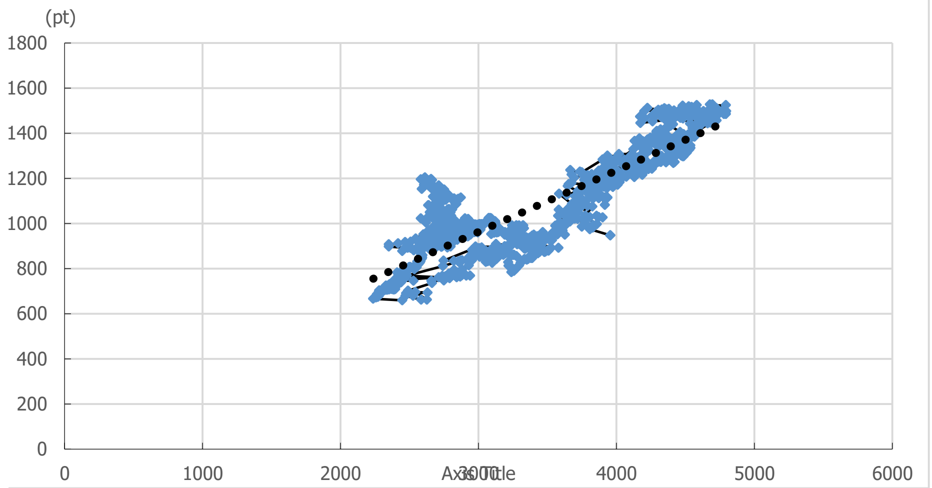


Source: Bloomberg, KIS

As can be observed that the Buffett indicator gives us some information about the valuation of the stock price. Based on the data above, it indicates a reason why Foreign Investors want to pour money into Vietnam market during 2017-2021 period because it is strongly undervalued. However, the recent figure at the end of 2021 shows some selling signal when Buffett Indicator reached to around 92%, investors should consider underweight their portfolio or avoid "FOMO" in order to keep their profit.

The correlation between S&P 500 and VNINDEX

Figure 3. Correlation between S&P 500 and VNIndex



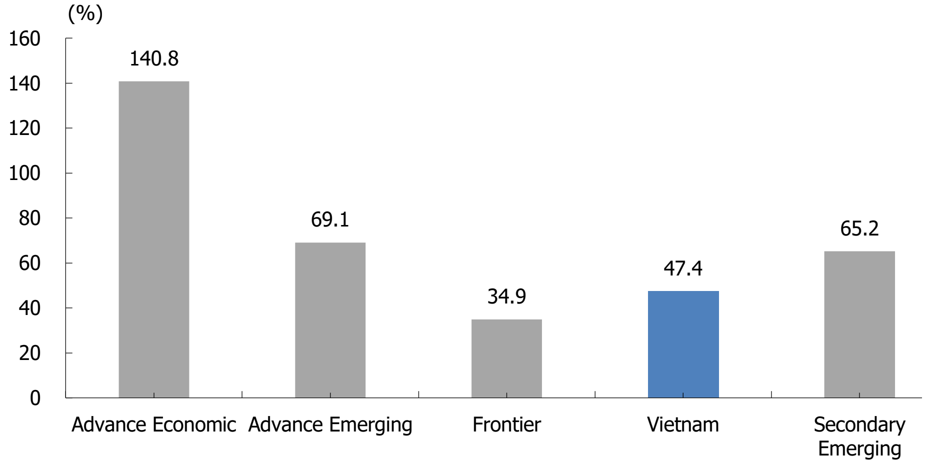
Source: Bloomberg, KIS

The chart above shows the correlation which measure the strength of the linear relationship between VN-Index and S&P 500 index. Based on correlation calculation, the figure is 0.891 which shows a positive correlation between 2 variables above. In another word, then the S&P 500 increase it is likely that the VN-Index will witness the same trend and vice versa.

Average Buffett Index in different kind of market

- Each country's characteristic part, in other words, the factor that should be 'discounted' in the eyes of investors in other countries can affect the stock market. For example, in the case of Korea, there is a ‘discount factor’ called a divided country. In the case of Taiwan, the “discount factor” is a future growth potential which is limited due to 'earthquake' and in case of Japan, it is the 'high proportion of the elderly population'.
- So, what are the discount factors in Vietnam? The biggest discount factor is that the Vietnamese stock market is still a ‘frontier market’. Therefore, approaching the average Buffett index of the past Vietnamese stock market under this assumption may be a way to consider a 'discount factor'.
- To look at the past average, we checked after 2006, when the Vietnamese stock market opened to foreigners, and after the UPCoM market opened, and the average was 47%.

Figure 4. Average Buffet Index in different kind of market



Source: Bloomberg, KIS

As can be known that Vietnam is listed in 'Frontier market'. Clearly, at 2Q22 all the stock in Vietnamese Market were overvalued because the average of Frontier Market was just around 35% while Vietnam was over 47%.

III. How is the Buffett Indicator used?

- According to Warren Buffett, if the Buffett Indicator approaches 200%, investors will face with a high risk of losing a huge amount of money.
- The Buffett indicator is one of the many sentiment indicators in the market today. Others are the fear and greed index, CBOE indicator, and the Bullish Percent Index (BPI), among others.
- These indicators don't necessarily tell you whether to buy or sell an asset. Instead, they tell you the market conditions and what to expect in the future.
- Many long-term investors can use it to predict whether stocks are overvalued or not.
- Still, a trader can use the indicator to gauge the sentiment in the market. If the index is substantially high, it might be a sign that the stock market is about to retreat, and vice versa

IV. Final Thought

The Buffett indicator used to be a relatively popular gauge of market sentiment. However, in the past few years, its efficiency has been relatively weak. Therefore, as a trader, you should only use it to gauge the market sentiment and not as a tool to find buy and sell opportunities.

true friend KIS Viet Nam Securities Corporation

VIET NAM
JAE HEUNG LEE, Business Director (jhlee@kisvn.vn +8428 3914 8585 - 1466)
UYEN LAM, Head of Institutional Brokerage (uyen.lh@kisvn.vn +8428 3914 8585 - 1444)
KIS Vietnam Securities Corporation
3rd floor, 180-192 Nguyen Cong Tru, Nguyen Thai Binh Ward, District 1, Ho Chi Minh City.
Fax: 8428 3821-6898

SOUTH KOREA
YEONG KEUN JOO, Managing Director, Head of International Business Division (ykjoo@truefriend.com, +822 3276 5157)
PAUL CHUNG, Sales Trading (pchung@truefriend.com +822 3276 5843)
27-1 Yoido-dong, Youngdeungpo-ku, Seoul 150-745, Korea
Toll free: US 1 866 258 2552 HK 800 964 464 SG 800 8211 320
Fax: 822 3276 5681~3
Telex: K2296

NEW YORK
DONG KIM, Managing Director (dkim@kisamerica.com +1 212 314 0681)
HOON SULL, Head of Sales (hoonsull@kisamerica.com +1 212 314 0686)
Korea Investment & Securities America, Inc.
1350 Avenue of the Americas, Suite 1110
New York, NY 10019
Fax: 1 212 314 0699

HONG KONG
GREGORY KIM, Managing Director, Head of HK Sales (greg.kim @kisasia.com +852 2530 8915)
Korea Investment & Securities Asia, Ltd.
Suite 2220, Jardine House
1 Connaught Place, Central, Hong Kong
Fax: 852-2530-1516

SINGAPORE
ALEX JUN, Managing Director, Head of Singapore Sales (alex@kisasia.com.sg +65 6501 5602)
CHARLES AN, Sales (alex.jun@kisasia.com.sg +65 6501 5601)
Korea Investment & Securities Singapore Pte Ltd
1 Raffles Place, #43-04, One Raffles Place
Singapore 048616
Fax: 65 6501 5617

LONDON
Min Suk Key, Managing Director (peterkey@kiseurope.com +44 207 065 2766)
Korea Investment & Securities Europe, Ltd.
2nd Floor, 35-39 Moorgate
London EC2R 6AR
Fax: 44-207-236-4811