



Benchmark Changes and Trends on the American Market During 2003-2013

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ABSTRACT

The benchmarks' emergence and development represent a turning point for financial markets, thus satisfying the need for a single stock product showing the market evolution as a whole, not just one rated security. The benchmarks are extremely important to study the health of financial markets and the overall local economy.

This study presents the analysis of the main U.S. market benchmark evolution from 2003 until 2013, emphasizing the pattern of recovering incurred losses, due to the current major crisis. This study is based on real updated data, and the conclusion lies in comparing these data.

Keywords : benchmarks, blue-chips, evolution, performance, shares.

1. Introduction

Stock markets are considered to be true barometers of good economic health, therefore the benchmarks representing one of its most important components deserve to be fully studied, since a stock market's future trend and evolution may be better observed by means of these elements. Assessing the impact the recent great economic crisis has had on major economies and especially the ways in which they try to avoid such negative events, represent a current topic on the agenda of many professionals in the field. The analysis on the major economic crisis evolution and impact and especially the methods set to exit the economic deadlock may be very well seen on the benchmark reports.

This study's objective is to analyze the evolution, the impact and the ability to recover the losses incurred during the global economic crisis.

The case study for this article was conducted using real updated data provided by specialized websites, and there have been used the following research methods: the enquiry, the crosscheck or the analysis.

2. The stock indexes

The reason why the stock benchmarks have appeared was the need to have a single stock product showing the market evolution as a whole, not just one rated security.

In the author's opinion – Dufloax, Claude in his work *Financial Markets* (Romanian edition, coordinated by Maria Niculescu and Alain Burlaud), Economic Publishing House, Bucharest, 2002, p.161 "The objective of a benchmark is to measure, by a single synthetic number, the market evolution by combining securities sample courses making up that market."

The analysis of stock markets as a whole is done using some indicators, as for any other national economy sector. Every stock exchange has its own system of indicators called *benchmarks*. A benchmark is the statistic index reflecting the securities market evolution over time as well as the security rates on the respective markets (<http://www.piata-de-capital.ro/indici-bursieri.php>).

Financial market indices are synthetic instruments for measuring the movements on financial markets as a whole or on a certain market. These indices appear as either arithmetic average – simple or weighted – or geometric ones and are

calculated to provide information on market evolution over time as well as the prices on the respective markets. (Maria Priscariu et. al., 2008, p. 176).

Thus the benchmark's main function is to reflect the overall development of the stock market. The benchmarks represent an important support for transactions with futures and options contracts, carried out in order to obtain a gain, as well as for hedging against possible risks.

The benchmark establishes the general level of stock quotes at a given time as compared to the time reference chosen from a past point of view (Lefter Chirica, 2011).

Most stocks classify their shares according to their liquidity, namely the ease with which they can be bought or sold. In general the bigger a company is, the more the trading investors and the greater the number of ready-to-quote brokers (- Jon Wiley & Sons, 1999, p. 85).

Benchmarks have evolved in terms of relevance, from a single capital market, located in one country, to international financial markets, a fact that has been highlighted by the emergence of global benchmarks and those proper to the countries in the Euro area (Gabriela Anghelache, 2009, p. 498).

We must remember that the benchmarks are indices reflecting the change of values occurring within a group of shares. As regards the precision level with which these indices are tracking the market, it must be matched to the type of shares, their calculation method and composition.

After studying the shares' closing prices, Dow reached the conclusion that it was possible to create a stock index, the first he created, in 1884, being the Dow Jones Industrial Average, which is the average (arithmetic) price for 11 categories of shares.

To be included in a benchmark's composition, the securities must meet certain eligibility requisites: high level of stock market capitalization; high level of dispersion; the securities structure composing the benchmark to track the distribution by activity sectors of the securities listed on the stock market; the securities quotation to be made by the computerized exchange system. The modalities for establishing the proportion of participation shares in this portfolio shall be set by using one of these two criteria: capitalization or share price. If benchmarks have originally been created only for shares,

nowadays there are indicators tracking the evolution of other securities, such as bonds or securities issued by mutual funds.

The benchmarks are some of the most interesting stock products, considering the advantages it offer the investors to use them as a stock transactions support in terms of both contracts and the ability to synthesize the overall market evolution.

Therefore, these:

- are a measure of the value dynamics either of an overall market, a particular industrial sector or services, or of a representative group of shares or all actions listed on the stock market;
- highlight the general direction in terms of securities rates on the market they represent;
- measure investors' habitual preference in terms of investing the available amount in the economic activity;
- enable comparisons over time, which can not be influenced by the inflation rate;
- characterize the overall business climate, depending on economic, social, political factors, as well as on all processes and phenomena influencing the economic and social life. Therefore, the stock market, reflected by its benchmarks, represents a barometer of national, regional or even global economic condition.

3. Case Study: The main U.S. benchmarks evolution

3.1 The Dow-Jones 30 Industrial Average

The Dow-Jones 30 – Share Industrials Average is the best known and the most quoted U.S. index, being the general standard used by the press and other media to measure the progress on the U.S. stock market.

This index, calculated for the first time on May 26, 1896, is tracking the evolution of the most important 30 blue chips (stable large and profitable companies) in the United States.

The name comes from the names of the two who first calculated this index: Charles H. Dow and Edward Jones. The term “average” comes from the original way of calculating the index, which was a simple arithmetic average of 30 component shares rate. Nowadays the calculation method is approximately the same, but a divisor has been introduced, used to reflect the changes occurred on the component shares as well as to ensure historical continuity and comparability of data. The first value of this index was 40.49 points, on May 26, 1896(<http://protic.net/indici-bursieri>).

It is a 1 generation benchmark, containing 30 shares belonging to industrial companies. Nowadays non-industrial companies are included in this index such as: J. P. Morgan or Mc Donald's. Initially, the benchmark was calculated as an arithmetic average of the 30 values.

The securities used to calculate this index are selected by the Wall Street Journal, based on business growth and on economic and financial performances.

Amended numerous times, the benchmark currently has the following composition: 3M, Alcoa, Altria Group, American Express, AIG, AT&T, Boeing, Caterpillar Inc., Citigroup, The Coca-Cola Company, DuPont, ExxonMobil, General Electric, General Motors, Hewlett-Packard, Home Depot, Honeywell, Intel, IBM, Johnson & Johnson, J. P. Morgan Chase.

The evolution of the Dow-Jones 30 Industrial Average over the last ten years is shown in Chart 1:

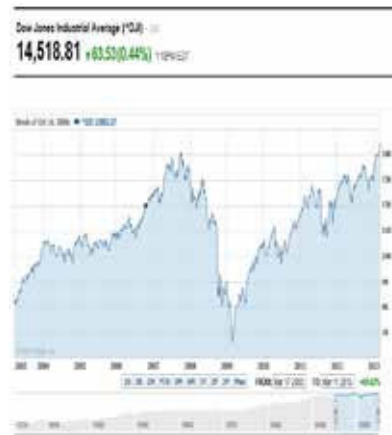


Chart 1: The Dow-Jones 30 Industrial Average Evolution during March 2003 – March 2013

Source: <http://finance.yahoo.com/echarts?s=%5EDJI+Interactive>

Looking at the chart above one can notice the benchmark's spectacular recovery, an upswing which even exceeded the pre-crisis peaks during 2008-2009.

The securities used to calculate this index are selected by the Wall Street Journal, based on business growth and on economic and financial performances.

3.2 The Standard and Poor's 500

The Standard and Poor's 500 is an index consisting of 500 shares selected by the Standard and Poor's Corporation (Mc Graw-Hill division) being quoted every minute of the trading day. The total market value of the shares making up the index represents 80% of the shares traded on the NYSE.

After the Dow Jones, the S&P 500 benchmark is the most important on financial markets. Many mutual funds, exchange-traded funds and other funds, such as retirement benefit plans, are designed to track the evolution of this benchmark.

The S&P 500 just like all benchmarks in this group are weighted by market capitalization and the capitalization policy includes the following shares: Microsoft, General Electric Intel, Wal-Mart, Cisco Systems, Lucent Technologies, etc. It is used as a support in the futures on the Chicago Stock Exchange and in the options contracts on the NYSE.

This benchmark is traded on one of the two major world capital markets: NYSE (New York Stock Exchange) and NASDAQ. In Chart 2, there is the S&P evolution:

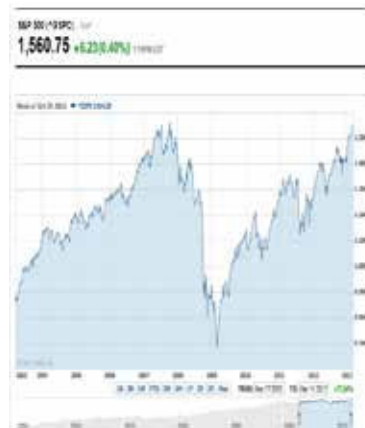


Chart 2 : The Standard and Poor's 500 Evolution during

March 2003 – March 2013

Source : <http://finance.yahoo.com/echarts?s=%5EGSP-C+Interactive>

Since the composition of the S&P includes all shares, also forming the Dow-Jones 30 Industrial Average, one can observe a nearly perfect correlation between these two benchmarks.

The two benchmarks' generated charts are almost identical and the S&P's current upswing and growth is no less spectacular than the Dow-Jones 30 Industrial Average

If we make an analysis of the latest results of the U.S. capital market, we shall find a less visible and more difficult to understand reality. If we consider the NYSE since December 3, 2010, we will see a 6.51% increase in the S & P 500, while the Dow Jones benchmark increased by only 4.20%. This difference reflects investors' views on the U.S. economy, on one hand and the world's economy, on the other hand (<http://www.tranzactiiforex.ro/forex/totul-despre-forex-trading/3793-indicele-bursier-sap-500>). The S&P 500 includes the Dow Jones components, plus another 470 companies in the United States and it is known as a benchmark of the U.S. economic health.

The S&P500 and the Dow Jones achieved an almost perfect degree of correlation in the past 50 years, nevertheless, the yields of the two have experienced significant variations. Overall, in the last half-century, the two benchmarks' annual yields were 8% for the S&P500 and 7.6% respectively for the Dow Jones (Ibidem).

By studying these reports, one can see that the S&P 500 has a better performance during times of growth, while the Dow Jones offer better yields in periods with decreasing trends. The explanation for such evolutions comes from the composition of the two benchmarks, since the S&P 500 contains many more small companies than DJIA (Dow Jones Industrial Average). Another S&P 500's advantage would be that in its composition there are several technological-profile companies, a fact which helps to have more significant increases.

3.3 The Russell 2000

The Russell 2000 is a benchmark with market capitalization measuring the aggregate performance of the smallest 2,000 U.S. companies listed on the stock exchange. The average capitalization of a company which is part of the Russell 2000 is 580 million USD. The largest company present in this benchmark has a market capitalization of approximately 1.5 billion USD.

Besides the Russell 2000 there are also other benchmarks, such as the Russell 1000 or the Russell 3000. These benchmarks are quoted every 15 seconds and represents approximately 98% of the U.S. securities markets.

The Russell evolution during 2003-2013 is shown in the following chart (Chart 3):

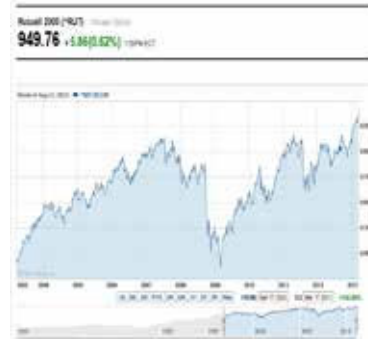


Chart 3 : The Russell 2000 Evolution during March 2003 – March 2013

Source <http://finance.yahoo.com/echarts?s=%5ERUT+Interactive>

Looking at the chart above one can also notice an increase and a return of the benchmark value that substantially exceeds its value before the 2008-2009 crisis.

4. Conclusions

The benchmarks evolution can be observed from the case study ; one can also notice how the global crisis has influenced the benchmarks development and also, how to recover losses. If since 2003 until 2007 there can be seen almost a linear growth, by the end of 2007 a period with a dramatic fall in the benchmark value, that even reached values close to those of 2003. Along with the proposal and application of economic growth models, economies began to emerge from recession, a fact that can also be seen in the benchmark charts, these ones recovering and, in some cases even exceeding the baseline values prior to the economic crisis.

The utility of studying the benchmarks evolution lies in the fact that, if one wants to analyze the health of an economy or even of the global economy, this may be done by studying the benchmarks, given that the benchmarks' aim is precisely to study, by means of data, the market evolution or one of its specific sectors.

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