

# INVESTOR SENTIMENT - THEORETICAL ASPECTS AND PRACTICAL CONCLUSIONS, IN THE CONTEXT OF THE PANDEMIC CRISIS

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## **Abstract**

*In the current context of the health crisis of 2020, in which financial analysts and researchers foresee an economic and financial crisis that will follow, this work analyses the subject of the psychology of participants in financial market mechanisms, as a determining factor of their evolution. Financial market reviews should not overlook the emotional component of the stock market functioning. Market sentiment plays an important role in the evolution of stock market volatility and can significantly influence registered indices in a positive or negative sense. This theoretical study of investor sentiment is a conceptual foundation of the economic reality we live in. Based on a concatenation of the aspects that researchers have expressed in their scientific researches, this study concludes by determining causal factors of the parallel evolution of market sentiment and economic growth. At the same time, the aim of the study is to draw the attention regarding the implications that an enhancement of investors' sentiment may have on the deepening of the decline of financial markets. In the context of the Covid-19 crisis, the study's conclusion is a recommendation to investors for rational balance and caution in the basis of decisions.*

**Keywords:** investor sentiment, cyclicity of the economy, market sentiment

**JEL Classification Codes:** G02, F44

## **1. Introduction**

Market sentiment, also called investor sentiment, is the general attitude of the latter towards a particular financial market. It is the manifestation of a market or psychology of the individuals who compose it, materializing through activity and the movement of the prices of the transactions made. Thus, financial market forecasts should not omit the emotional component of the stock market mechanism. Market sentiment plays an important role in the evolution of financial market volatility and can significantly influence the recorded indices in a positive or negative sense.

Even if the fundamental value of a market is the performance indicator, the behaviour of financial markets is much more complex than that, there are deviations from the estimated trend based on fundamental factors. The emotional manifestations of investors also influence the evolution of financial assets. These emotional accumulations can manifest themselves generally in the financial market, by distinct sectors, or even on individual assets, but decompensation is identical in all situations. In general, and naturally, investor sentiment is positive at times of price growth, and negative when traded prices are experiencing a downward trend.

Analysts base their estimates mainly on the short term and on the sentiment of investors, the impact that this phenomenon has being spontaneous, with immediate reaction, but with a return to the initial trend quite rapid. It should be noted that manipulating investor sentiment is an opportunity for stock market speculators to make an immediate profit. Some investors find it as a source of profit finding stocks that are overvalued or undervalued based on market sentiment. In these circumstances, quantifying and estimating investor sentiment is essential for understanding stock markets, which is why a number of indicators have been developed to help determine the level of impact.

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## **2. Theoretical-conceptual aspects and causal factors regarding market sentiment**

The concept was first mentioned in the literature in the 1990s, when research in the field of stock market risk extended the study area to new factors of inflection, which improved the quality of the forecast analyses of financial evolution. Pioneering was initiated by DeLong, Shleifer, Summers, and Waldmann (1990), asserting that investors are subject to sentiment, defining this term as a belief about future cash flows and investment risks that are not justified by objective factors or justifiable events.

With the deepening of this concept by academia, the term became a certainty, and in the following decades, investor psychology was analysed qualitatively and quantitatively. In 2007, Baker and Wurchler already consider hypothetical the fact that investor sentiment affects stock prices and aim to explain investor sentiment and quantify its effects. One approach is from the bottom up, using prejudices in the psychology of individual investors, such as excessive trust, representativeness and conservatism, thus explaining how investors under-react or exaggerate the yields or events to which they are exposed. Shefrin issues the theory that differences of opinion between investors or constraints that cause spontaneous sales generate a wrong valuation, so that the erroneous view of investors indirectly causes changes in stock market behaviour. Thus, if the psychology of participants is aggregated into the econometric model of prediction, then a more accurate assessment of the market, share prices and volume of trading can be carried out.

M. Baker and J. Wurchler study investor sentiment in detail, concluding that major economic crises tend to occur at times when investors express a high sense, but the timing of these events is very difficult to predict. This study determines a number of challenges that investors face: the ability to measure uninformed demand, understanding changes in investor sentiment over time, and identifying stocks that tend to attract speculative transactions. These statements complement the hypothesis made by Barberis, Shleifer and Vishny that betting against sentimental investors is costly and risky.

Investor psychology is decisive on the risk factor, with rates of return directly influenced by the participants' sense of behaviour. Yoshinaga appreciates that after a period of negative feeling the rates of return are higher than those after a period of positive sentiment. In other words, investor pessimism is more pronounced than optimism, the negative footprint on which the prospect of a financial crisis is stronger than optimism-induced aspirations.

Pece believes that the impact this phenomenon has on the rational course of financial markets is determined by the so-called "herd phenomenon". The circumstances on which its occurrence depends vary from one capital market to another and from one sector of activity to another, depending on the environment in which it propagates. Thus, it is noted that the psychology of participation changes suddenly and radically in times of crisis, but the negative effects are felt differently, both at market level and at sector level.

I.C. Sechel brings to the attention the sentiment of investors, whom she considers "directly related to the overall evolution of the stock exchange". The term, used 1990 by DeLong, Shleifer, Summers, and Waldmann, assumes that investors are subject to sentiment, broadly defined as a prediction of the evolution of investment flows and risks that cannot be justified by obvious arguments. Thus, if investor sentiment is high, stock quotes react with an upward trend. Otherwise, when investors express a low sense, the evolution of the stock market is on a downward trend. What is called the "investor sentiment phenomenon" can be determined by taking into account their expectations for the evolution of the various publicly listed assets, reporting us at several time intervals. Thus, hopes, concerns and opinions, after all, even subjective, determine optimistic or pessimistic behaviour, as well as investor decisions, and therefore shape to some extent the future evolution of the stock market. It should be noted, however, that this factor influences in the short term and may cause short-term behaviours. On the other hand, it is considered to be a difficult feature to predict, the

analysis of investor sentiment being carried out by periodic surveys, which are subject to subject to subjectivity.

And other scientific papers, as Claessens and Yortoglu (2015) and Joeveer (2013), highlights the importance of investor confidence as one of the main causal factors in the performance of a listed company on the stock exchange. , being in some cases more important than the statistics of performance indicators. As a result, investor behaviour directly influences both the primary and secondary financial markets through the decision-making events they undertake on the stock market. At the same time, researchers draw attention to the indirect connections between investor psychology and economic development. Moreover, given that we are in an increasing process of globalization, the business environment extrapolates the phenomenon beyond the demographic borders. Dăianu explains this concept, arguing that major investments depend on the mood (market sentiment) and perspective at the level of the European economy, so that firms that depend heavily on demand at national level have a significant investment disadvantage, with credit institutions showing suspicion at high risk.

In his paper, Titan considers the feeling of investors as either rational or irrational. Here we refer to a mass emotion, not individual, to a behaviour that the participants in the stock market manifested deliberately and in the majority. Titan considers rational behaviour to be the basis of traditional theories related to the mechanism of financial markets, with classical literature approaching the investor as a rational entity, the decisions of which are based on arguments anchored in reality. On the other hand, the experience of the last years pays more attention to irrational manifestations, the theory of behavioural finances proposing two concepts. The concept of limited rationality, in which decisions are considered to be taken rationally, but the level of rationality is limited by the knowledge to which it has access and the strong feelings it feels. A second concept is the theory of perspective, which aims to explain the deviations of investor behaviour from the reactions assumed by the theory of traditional finances.

### **3. The cyclicity of investor psychology**

Based on the analysis of the behaviours that investors react, the terms 'bulls' market' and 'bears' market' are known in the specific vocabulary. A bull market is a market that is growing and where the conditions of the economy are generally favourable. A bear market exists in a retreating economy, where most stocks are declining in value. Because financial markets are strongly influenced by investors' attitudes, these terms also denote how investors feel about the market and the economic trends that follow. A bull market is characterized by a sustained increase of the prices. In the case of stock markets, a bull market signifies an increase of the prices of company shares. In this situation, investors often have faith that the upward trend will continue in the long run. In this scenario, the country's economy is usually strong and employment levels are high. Instead, a [bear market](#) is one in decline. A market is considered a "bear" where the decline is represented by a decrease of more than 20% compared to recent highs. In a bear market, share prices are constantly falling. This leads to a downward trend that investors believe will continue; this investor behaviour perpetuates the downward spiral and accentuates the decline. The key determinant of whether the market is bull or bear is not just the spontaneous reaction of the market to a particular event, but how it performs in the long term. Small changes are only a short-term trend or market [correction](#), with the estimate of a stock market dominated by bulls or bears being determined only a time frame of a few years. However, not all long-term movements are considered to be characterized as "bull" or "bear". Sometimes a market can go through a period of stagnation, which explore the next evolution and tries to find direction.

With a constant need to understand this phenomenon in the real economy, researchers interested in the premises and effects of investor conduct identify how investor psychology evolves according to the stages of the financial cycle. Of course, investor sentiment refers to those patterns of behaviour identified in a large number of participants, whose skills are found at a common denominator, determined by similar causalities. The main challenge in the study of financial markets is to predict their developments, since a fundamental feature of this mechanism is uncertainty itself. Through statistical research reported to different economic-financial environments and time intervals, it was concluded that the projection of evolution is sinusoidal, as a result we can say that financial markets are cyclical.

This cyclicity is based on macroeconomic, monetary, but also aspects related to the sentiment and psychology of crowds. Repetitiveness is not identical and the time intervals are not accurate, but depend on internal and external factors, but the basic evolution and effects are essentially the same. Cycles differ in duration and amplitude and their manifestation in the financial market is usually pursued proportionately by the real economy. Based on the statistical studies carried out and the scientific research that analysed the behaviour of the markets, the evolution of the markets can be graphically represented (Fig.1), highlighting the manifestations in which the psychology of investors materializes. It should be noted that market sentiment follows the trend of reality in the market, but has a shifted behaviour towards economic events that cause the mood to change.

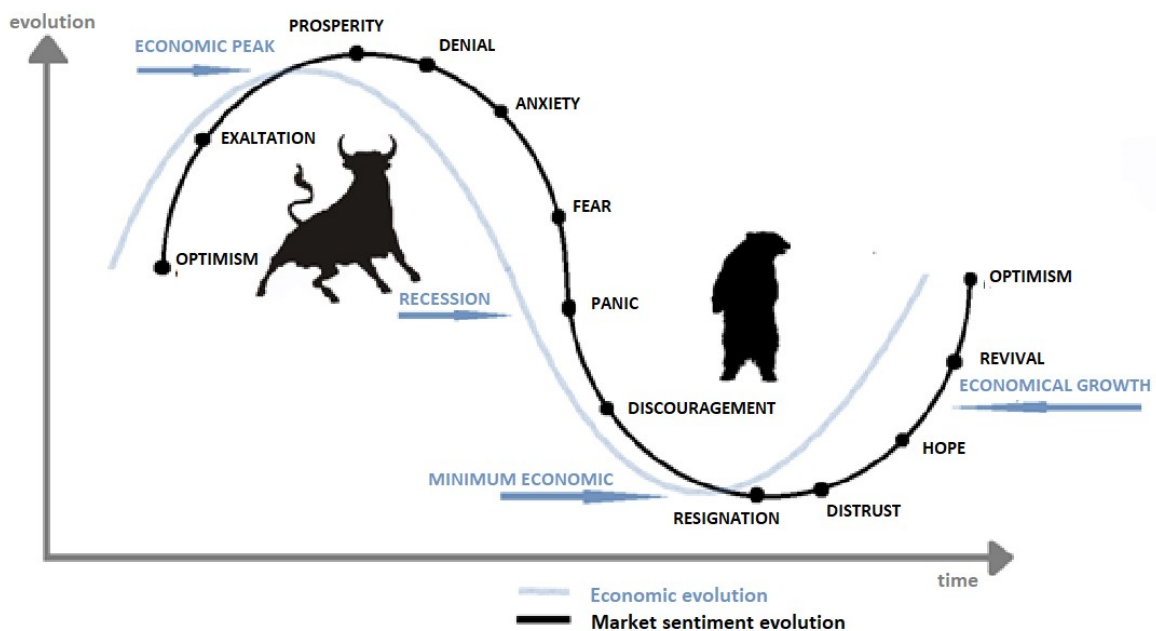


Fig. 1 The cycle of market sentiment  
Source: adaptation of the author

#### 4. Quantification of market sentiment

The subjective nature of investor sentiment is axiomatic, as a result it is risky to say that this determinant can be accurately estimated and more than that, to argue that precise identification of the causalities is feasible. However, scientific research provides analysts with acceptable methods in order to determine evolutionary models and econometric methodologies for estimating the amplitude and impact that market mood has on economic and financial mechanisms.

Pece mentions in the study on this topic that investor psychology can be analysed by direct methods, as questionnaire-based analyses, by directly involving investors and studying their perception of the economic environment perspective and the future evolution of capital

markets, here we can mention indicators such as: Michigan Consumer Sentiment Index (MCSI), Investor Intelligence (II), Economic Sentiment Indicator (ESI). The phenomenon can also be studied by indirect methods, which use financial indicators that reflect the behavioural deviations of investors, including: number of initial public offerings, liquidity, discount granted at the close of the fund, average return on the day after the completion of the initial public offer, ARMS index.

In order to quantify and predict the subjective behaviour of investors, theoretical-conceptual agreements have been translated into empirical studies in the literature. Scientific research has shown that both causal factors and the impact that investor sentiment has on the market are difficult to argue by a simple analogy with factual indicators, so that the scientific environment has turned to the creation of composite indices, in order to integrate into the analysis a greater number of determining variables. In this direction, a representative study is that of researchers Beer and Zoouaoui, who divided the gross sentiment indicator into rational components, related to the economic fundamentals and a psychological component related to investor sentiment, simultaneously investigating the impact of economic fundamentals and investor sentiment on stock yields. The results of the study show that the behavioural approach is complementary to the rational approach. The research proposes a composite sentiment index, corroborating indicators used in the previous literature, i.e. indicators of direct measures (including consumer confidence index, investor information index) and indirect measures (among which we list the number and return of the environment of the initial offers of listed shares, new net cash flows of US mutual funds, the value of CFD). The Beer-Zooui composite index was compared with both the indices in its construction and with other indices used in the literature (the Brown-Cliff composite index) and the Baker-Wurgler composite index), concluding a dominant position of the new indicator in estimating stock yields, which provides a better estimate of sentiment by condensing the mood of a very large sample of investors. As a result, it has been empirically proven that investor sentiment is determined by multiple factors, and impact estimation is a complex process.

## **5. Conclusions**

As a conclusion of the theoretical-conceptual analysis of the literature addressing the phenomenon of investor sentiment, as a determining factor in the evolution of financial markets, it should be noted that in recent years special importance is given to the psychology of participants, noting that it has an increasing degree of the impact on the evolution of stock markets. Analysing the literature, a refinement of the definition and causations involved in this concept was observed; so that if in the 1990s researchers had noticed and defined the term market sentiment, in the last two decades it was deepened and its effects were econometrically evaluated.

From the comparative analysis of scientific research, we conclude that changes in economic developments and financial markets are accompanied by emotional manifestations of investors, which in turn influence, through reciprocity, the evolution of financial assets. In other words, the influence is exercised in two-way and thus disproportionate imbalances may occur. These emotional accumulations can influence the financial market in general within a certain time frame or manifest themselves on distinct sectors or even individual assets.

The increasing impact that investor psychology has on the evolution of financial markets can be argued by several determinants: technological progress and rapid and extensive access to information that determines the mood of investors, the phenomenon of fake-news or biased information misunderstood by them and the so-called "herd phenomenon", globalization and the phenomenon of contagion on which financial markets feel, especially in crisis situations.

From the analysis of the sinusoidal evolution of market psychology, it is important to point out that investor sentiment follows the trend of economic evolution, but the time gap it has can be used in econometric studies to predict future developments in stock indexes.

It should also be noted that investor sentiment tends to exaggerate reality. Thus, the manifestation of "bulls" in the period of economic growth is not always a beneficial one, it can generate irrational behaviours of investors, overestimation of the market and speculative bubbles. In contrast, in times of crisis, investor pessimism accentuated the decline of stock indexes, such as withdrawal from the market, hasty decisions on the transfer of funds or involving the phenomenon of the herd in the dislocation of resources in certain sectors.

In the current context of the 2020 health crisis, market sentiment plays a key role in assessing and predicting financial market movements. We are currently experimenting with the theory already mentioned by the literature that the sinusoidal trend of evolution is not identical. Unlike the 2008 financial crisis, when the financial decline triggered, investors showed a constant sense of decision-making contraction, investor psychology in 2020 is proving to be more volatile, caused by the uncertain health situation contrasting with government efforts to support the economy and at the same time by the considerable information flow. In such situations, academia recommends maturity in decision-making, risk-taking caution and balance in assessing market sentiment.

In conclusion, we estimate that the experience of the economic crisis started in 2020 will confirm the theoretical-conceptual aspects expressed in the scientific research carried out on the topic of investor sentiment and will in future give new points of view that explain this concept as a fundamental component in the evaluation of financial market mechanisms.

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