# The Behaviour of Intelligent Investors at Financial Markets: Insight from Slovenian Investors

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# Abstract

Intelligent investors differ from speculative or non-professional investors in the fact that intelligent investors act countercyclically; that is, they act against the trend, or otherwise, they buy when prices have already fallen and sell when their rate of selected investment has already risen. An example of countercyclical behavior can also be explained by the thinking of professional investor Warren Buffett, who points out a simple investment rule: "Be scared when others are greedy, and be greedy when others are scared." Since crypto markets have recently emerged, there is a need for researching the best strategy for investments in their financial instruments. To get an insight into the behavior of Slovenian investors, in-depth interviews were conducted with a sample of financial experts. The article presents tips for the correct responses of intelligent investors in financial markets.

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# Introduction

Investing is a very important activity in our lives. It allows us to exalt our capital. We can multiply it over time by investing our money in assets such as stocks, bonds, precious metals, or digital assets. If we apply effective and smart investing principles, we can receive profits and secure our financial future. The intelligent investor can do this. He needs to know enough about the financial instruments that he is purchasing (Great performers, 2021).

When we talk about investing in financial instruments, it is important to distinguish between investing and speculating. According to Graham (2009), the difference between investing and speculating is that investing is an investment that provides the investor with a safe principal and a reasonable profit. When speculating, the investment does not meet such criteria. Therefore, an intelligent investor is not the one who takes a higher risk or buys growing financial instruments, but the one who is willing to invest more effort and time in studying the market and financial investments than an average investor (Graham, 2009, pp. 159). Mention should be made of Graham's definition of investment (Graham, 2009, pp. 18-35), which emphasizes that investment (not speculation) is an investment that, after careful and prudent analysis, indicates security, that is, to maintain the principal and obtain still a reasonable profit. Careful analysis means examining all the facts that comply with investment security standards. The security of the principal indicates protection against losses under normal circumstances; an appropriate return, however, is any profit accepted by a "reasonable" investor (Graham, 2009, pp. 35).

This work aims to provide guidelines according to which an intelligent investor should operate in the crypto market. The paper presents financial instruments, the importance of investment advice, the role of stockbrokers and smart investors. The research part presents the survey results conducted on the sample of Slovenian investors regarding the correct response of intelligent investors in the financial markets.

# Background

### Financial instruments

Financial instruments are not the same as bank deposits. When purchasing, the investor assumes the risk that due to adverse conditions in global financial markets due to changes in the operations or creditworthiness of the financial issuer, market conditions in instruments, money, and currencies, interest rate movements, achieved a lower price when selling a financial instrument as paid for it at the time of purchase. The price of a financial instrument or the value of a client's investment also depends on the global political situation, the political situation in a particular region or country, natural and ecological disasters, wars and other emergencies, crises and other changed circumstances and perhaps other causes, e.g., the COVID-19 pandemic (Ilirika.si, 2021).

Financial instruments can be divided into transferable securities, such as shares and bonds, money market instruments, units of collective investment undertakings (units of various types of funds), and derivative financial instruments such as options, futures, swaps, and other derivative transactions with financial instruments, currencies, interest rates, commodities and other variables (Gov.si, 2021).

The basic purpose of financial instruments is to raise capital to finance various projects. Many forms of financial instruments offer investors various opportunities to invest the surplus of their funds. Financial instruments differ from me in their complexity, risk, liquidity, returns, and the like.

Often, financial instruments are divided into uncomplicated and complex financial instruments (Financial instruments, 2021).

Uncomplicated financial instruments are eligible for most investors and represent stocks, money market instruments, bonds, and other forms of debt financial instruments.

Complex financial instruments are suitable for experienced investors. Experienced investors are those who know the functioning of financial markets and the risks associated with them. Complex financial instruments include options, futures, derivative transactions related to securities, currencies, interest rates, or returns as underlying instruments (Vlagatelj.atvp.si, 2021).

### Investing in the crypto market

The blockchain industry is getting stronger every day. Cryptocurrencies are a new class of assets to which the financial and investment community pays a lot of attention. Certain risks in the crypto market are not as prevalent in traditional financial markets (McNally S., 2016; Almeida et al., 2015, Levy, 2021).

Cryptocurrencies are becoming an increasingly used financial instrument to raise capital. As a result, forecasting the movement of cryptocurrency rates is also becoming more and more interesting. In a short time, several tools and models for predicting the movement of cryptocurrency exchange rates have been developed for this purpose.

However, finding a model for predicting future cryptocurrency values is not that simple. We need to consider the fact that a multitude of other investors needs to be overcome in trading. We need to be aware that 100 % accuracy of the model cannot be detected. Since we do not have a basis on which to rely, the goal is to design the most accurate model possible while adapting the trading strategy. The basis of any model is "real" data. Without good data, even such a good model is practically useless. Streams must be sufficient and authentic. In both the securities and cryptocurrency markets, the trend in exchange rate movements is more interesting than the value of a particular exchange rate. For success in the markets, it is necessary to determine when to enter and when to exit a long position or, even better, how to properly respond to a certain exchange rate trend of a certain financial instrument (Jelenčič, 2015).

If we focus on the cryptocurrency market, the literature (Jelenčič, 2015) recommends monitoring AMA (adjusting the moving average), EMA (exponentially moving average), and SMA (simple moving average).

The Adjusting Moving Average model works best in practice. It is insensitive to small shifts so that the model gains predictive power and at the same time adapts quickly enough to larger shifts in price or at least partially maintains local extremes.

The article (Almeida et al., 2015], highlights an Artificial Neural Network (ANN)based Bitcoin forecasting model. Using its previous-day price and trading volume, it was constructed to predict its price over a one-day prediction horizon. Reference [20] explored several models (Recurrent Neural Network (RNN), Auto-Regressive Integrated Moving Average (ARIMA), and Long Short-Term Memory (LSTM)) to predict Bitcoin prices sourced from the Bitcoin Price Index (BPI).

The training was performed using Graphics Processing Unit (GPU) due to the volume of computations required to train the models. RNN was the best choice between the three models to perform Bitcoin forecasting.

In Greaves et al. (2015), several regression models were compared for Bitcoin price prediction. The baseline, linear, SVM (The hybrid Support Vector Machine) model utilized both fundamental and technical analysis to forecast and make

recommendations) and ANN regression models were used to predict Bitcoin's future prices based on past data. The results indicated that the linear regression method was the most suitable for prediction (Indera et al., 2021).

### Investment consulting

Investors who decide to choose an investment company (investment advisor) to obtain investment information are also willing to pay a commission for this. Deciding on investing in financial instruments is almost always based on the advice of investment advisers (Graham, 2009, p. 257), who represent important information intermediaries in the financial market. These include stockbrokers, investment banks, and others (Graham, 2009, p. 257). Their primary task is to achieve added value for the investor through active investment management.

Jurczyk (2011) states that so-called "stars" among portfolio managers sometimes appear in the financial market. Stars because, through consistent market assessments and accurate company analysis, they have managed to exceed the value of the stock market index at least once (Jurczyk, 2011). A success period of such portfolios of about one year is often followed by a period of failure. Therefore, investors are right to ask themselves whether portfolio managers can achieve a better result than just passive investments in the amount of the stock index and where they can find the best financial information themselves.

Brokerage houses are the most common brokers of financial information. Brokerage houses are members of stock exchanges and carry out purchase and sale orders for commission. They usually have their analytical department, which analyzes companies, industries, the global financial market and prepares reports for capital investment.

The investor can also obtain information from stockbrokers, financial analysts, or stock analysts. The job of a stock market analyst is to examine individual securities, compare them with each other, and form an expert opinion on future investment opportunities (Graham, 2009, pp. 261-262).

Investment banks are mainly engaged in issuing, insuring, and selling new shares and bonds.

We distinguish between financial service and investment advice. Organizations that provide financial services provide information to those who manage their finances themselves or manage them for others. Financial service organizations produce periodic reports for their clients on the state of the economy, stock market movements, forecasts and information on individual securities, etc. Most of these organizations focus on stock market movements forecasting. The author Graham (2009) advises that investors should not make investment decisions solely based on financial service organization recommendations. Information from financial service organizations is best used only as an additional data source to already obtained information from own or other sources (Graham, 2009, p. 261).

The investor may consult with various investment advisers when deciding on investing in various financial instruments. However, the indicators used by analysts to assess the market, industry, company, security, or cryptocurrency are as good or bad as the good or bad work of the author. This stock analyst formulates these indicators.

However, when obtaining information from the financial intermediaries listed above, the investor does not ask himself what is behind the published indicator or report.

Analysts also face systemic limitations in their work, with obstacles that manifest themselves in the form of conflicting interests between them and the clients of

analysis (bank or portfolio management company) (Heese, 2011, p. 61); this question should be one of the fundamental issues for the investor, which refers to the critical assessment of the information obtained by investment advisers.

### The neutral role of stock analysts

The fundamental goal of financial analysts is to extract relevant information and draw correct conclusions about optimal investment opportunities based on the numerous data offered by the financial market (Bizer et al., 2013, p. 20).

As these are primarily financial analysts or stock market analysts (after this referred to as analysts) associated with banking institutions, it is appropriate to examine their research background. Like other investment advisers in the financial market, analysts are only intermediaries in the so-called "financial industry." In the financial crisis, securities analysts are once stigmatized as the perpetrators and secondly as "victims" of the financial crisis. If we looked at the latter in more detail, we would notice that the aforementioned black-and-white categorization of stock market analysts is more or less blurred (Heese, 2011).

Although neither bankers nor analysts are rewarded for successful operation, the profession of stock market analyst brings many benefits. One is that analysts, often even more so than journalists, have the opportunity to have direct contact with the leadership of powerful and leading global corporations, the opportunity to participate in numerous conferences, and the like. In contrast to journalists, analysts have the expertise to actively participate in discussions and enjoy the reputation of recognized experts (Heese, 2011, p. 61).

But there are also downsides to the role of a stock market analyst. Banks (investment banks, commercial banks, brokerage houses) often hire analysts for their research. The bank itself maintains the dominant role over them; the same applies to analytical reports signed by the director of the financial organization on behalf of the analyst. As few as there are brave analysts who dare to reveal the truth and their opinion during the bubble in the capital markets, there are few opponents in the ranks of other investment banks. Critics argue that analysts are behaving procyclically. In the growth phase of the capital market, analysts, regardless of the game's rules and reason, massively recommend the purchase of financial instruments and vice versa in the phase of financial decline. Analysts are in this role in the financial markets as accelerators, both optimism and pessimism.

Even in more in-depth thinking about estimates of future movements in the prices of financial instruments, the question arises as to whether the estimated expectations about exchange rate changes determine the current exchange rate or vice versa. Experience shows as we have already mentioned, that analysts do react procyclically. In the course of stock market events, stock prices usually follow the assessments and recommendations of analysts. Otherwise, when analysts adjust profits to publications and reports, rates often deviate from expectations. Heese (2011) states that there are also cases where analysts do not react despite massive exchange rate changes. It is normal to expect self-interest companies to tend to show better business results than those shown by impartial and critical analysts (Heese, 2011, p. 46).

Is it a coincidence or an intention? In case the differences in the results are extreme, there are many explanations for this. As far as its presentation capabilities allow, the growing group will have the basic intention of presenting a predictable course of business to the public. Extreme and unpredictable fluctuations are always undesirable, especially during a boom. Many stakeholders want higher incomes, such as higher dividends for business owners, higher salaries for employees, higher contributions to the state, and the like. In times of recession, the opposite is true: the company will try to cover up liquidity and other financial problems related to earnings. From the above, we learn the tactics of accounting policy: in bad times, a company should present itself as a rich company, and in times of economic boom as a poor company. If the stock exchange price deviates from the share's intrinsic value, it usually also deviates from the value calculated by the analysts and not the company itself. The right stockbroker or portfolio manager will choose the lowest value between the two alternatives (Heese, 2011, p. 42).

As long as analysts cannot resist the sales pressures of banks and other clients of analysis, critical analysis as a marginal systemic disturbance will prevail in the banking sector. Therefore, in banking, research takes place more or less in the circles of assistants or distribution agents and not so much among stock market analysts (Heese, 2011, p. 63). To avoid conflicts between banks and analysts, banks are introducing a "proforma" internal control point (determining the conformity or reality of data) and separating them from business units. Business units and other internal and external control units of banks often fail in conditions of concentration of financial tension (financial bubbles) (Heese 2011, pp. 63).

Although there is a risk of passive and biased research, providers acting in favor of their clients, the analysis of the prices of financial instruments (shares) is nevertheless considered a necessary tool for assessing a financial instrument or market situation. Its success is particularly pronounced when the situation on the stock markets calms down, when restrictions become known and when a true assessment of financial instruments is available in the financial world.

Given the issues raised, we, like financial market investors, ask ourselves whether we can find data from neutral research that reflects the real situation in the capital market. Often, neutral analysts are public members, non-profit organizations such as universities, research, and development institutes, banking independent institutions, and the like. Neutral analysts, like all other analysts, deal with the stock market, forecast economic trends, research the financial market, develop new models for valuing companies, link international capital flows and seek solutions to create an optimal investment portfolio (Heese, 2011, p. 65). The latter is shown in more detail in Figure 1.

#### Figure 1

Neutral observers of stock market events

Universities		High, practically unattainable expectations (capital market efficiency theory) Applied approaches (portfolio theory)
R&D institutes		Studies on oil and energy prices, competition, international trade, capital markets.
Institutions independent of banks		Despite control mechanisms, there are conflicting interests between research providers and their clients.
Source: Author's illustration		

According to the rules, stock analysts belong to the group of neutral analysts, despite various restrictions and dependencies on their clients, to whom they are inadvertently subordinated.

Despite this issue, the legislation remains completely indifferent, so there are ambiguities: on the one hand, analysts are trying to obtain clean and accurate information about companies, industries, economic climate, and on the other hand, their goal is to represent the interests of their customers. But even if the state stipulates that there must be a completely neutral research institution in the financial market, investors could not be prevented from using such investment information based solely on banking studies and research. Therefore, an individual investor partially assumes the financial risk by deciding where to look for relevant investment information.

## Methodology

In the research part of the article, the seven most common tips are presented, which should not be ignored during the problems at the chosen place of investment. Of the 50 selected interviewees (financial advisers, stockbrokers, heads of banking departments, heads of pension funds, and companies), 22 were willing to answer the questions asked. Twenty-two randomly selected individuals, active in the financial industry (financial advisers, stockbrokers, heads of banking departments, and pension funds) agreed with all the presented advice: How to behave properly in the financial instruments market? Responses are summarised in the following chapter. Besides the empirical research, the literature review on this topic is also conducted.

# Results

### Rules of intelligent investment: Theoretical insights

Author Born (2009, p. 115) argues that intelligent investors are successful precisely because there are a large number of "unprofessional" or "unwise" investors in the market. An intelligent investor buys a bearish trend when everyone else sells and sells during a bullish trend when others buy (Graham, 2009, p. 192). Intelligent investors hope that as many short-term investors as possible will follow the free advice of bank advisers, advertising messages from portfolio managers, publicly announced targeted courses for analysts, and similar "information" and that they will assess the situation too optimistically at high and low rates but too pessimistic (Born, 2009, p. 115):

Investments need to be planned realistically, which means that it is necessary to precisely define the assets and available funds of the investor, which are intended for investment.

- Priority needs to be set for saving or investing, which means that it makes sense to prepare a retirement plan, a child education plan, a plan to increase wealth with passive income, or other additional income.
- To reduce investment risks, it is necessary to use investment diversification. It is necessary to be aware that there is no universal investment on the market that would have all the desired properties.
- A realistic time frame needs to be set. This means determining when additional income should be paid out and how much of the investment should be more liquid and which less.
- It is necessary to set limits on the risk, how much risk the investor can personally take on himself.
- It is necessary to adhere to the originally set plan. Namely, various financial institutions often entice investors with "favorable" savings and investment opportunities. An intelligent investor does not let himself be confused. He will

adhere to his outlined investment policy, which corresponds to his needs, wishes, knowledge, experience, financial condition, and investment goals.

- Investments need to be limited. An intelligent investor does not react to shortterm profits. He does not invest as much as he can afford. He is aware that offers that are "too good to be true" are such.
- The tax treatment of savings and investments also needs to be considered. Taxation itself, however, should not be a reason to choose a suitable investment (atvp.si, 2021).

### Rules of intelligent investment: Empirical insights

Responses of individuals who participated in the research regarding the intelligent response of the investor in the financial market can be summarised as follows:

• The intelligent investor has a high level of determination

The path to success in investment is paved with challenges, hardship, hard work, and sacrifice. Determination requires you to perform extensive research so that you can reach your goals. It is a necessary trait to have so that you can be a successful investor.

• The intelligent investor is patient

This is the most important trait that an investor can have. It is responsible for eventual results. The majority of investors make losses by acting on their emotions. Examples of these emotions are greed and fear. Intelligent investor needs to be patient to resist them. Maintaining his patience allows him to eliminate any mistakes that he may make actively.

• The intelligent investor has a high level of self-confidence

As much as it is good to invest in the image, the intelligent investor is careful not to spend too much on material things. By staying frugal, he can maintain enough money to survive major financial setbacks. As such, an intelligent investor is confident in himself through his ability and not his possessions.

An intelligent investor constantly focuses on his main goal or results

An intelligent investor is keeping his focus maintained on the desired results. He creates a plan, instills his main goal entirely, develops the trait of focus, and achieves success as an investor.

• The intelligent investor has a constant thirst for knowledge

Knowledge is power. Nowhere is this more evident than in the world of investment. Therefore, an intelligent investor develops the ability to learn as much as quickly as possible every day. The intelligent investor does not rely on opinions in the media based on speculation and hearsay. He trusts himself and his knowledge. This makes him successful.

• The intelligent investor is flexible

Investing has a collection of twists, turns, and challenges along the way.

The only constant changes. Therefore, the smart investor is fully comfortable with adapting and responding positively to constant change. He is always ready to adapt in real-time. He supports every move he makes with concrete evidence. This allows him for logical flexibility and success as an investor.

• Intelligent investor stays calm

In the world of investment, market conditions can cause financial chaos, and asset prices come fall. Crowds of investors exit the market and seek haven elsewhere. Intelligent investor stays calm and focuses on their goals. He can recognize the opportunities that all the other panicky investors miss as they run about in a frenzy.

• The intelligent investor is humble

An intelligent investor maintains humility despite his capability. If he stays focused on profit and amasses knowledge about investing, he can succeed in the market. Therefore, he delegates some of his responsibilities to people who are qualified to perform them. This allows him to have more time for investing and keeping in touch with reality. To be a winner in investing, you need to have the characteristics required for winning. The traits above are essential in transforming you from a classic investor to an intelligent investor in the world of investment (Great performers, 2021).

### Conclusion

An intelligent investor is aware that the right investment requires the right investment strategy, that the financial market requires planning, prudence and that the biggest dangers in the financial market are impulsive financial decisions of market participants and ignorance of the financial market.

A smart or intelligent investor is also aware that, in addition to basic indicators based on the company's assessment, market conditions, the global economic environment, the economic climate, and the response of market participants need to be examined. The best information is provided by stock exchange indices, which reflect changes in the capital market. It is also necessary to observe economic growth, decisions of the world central banks on the issuance of money, interest rate movements, etc.

When the investor considers that he is not up to all the indicators and methods for selecting financial instruments, he can consult financial intermediaries regarding investment opportunities. These can be stockbrokers, investment banks, and other financial institutions. Data in financial magazines and newspapers and the correct response of the investor to a certain market stimulus are also sufficient for an average return on investment.

With the help of several indicators, data, and information from investment advisers and other financial sources, the investor can assess the movement of share prices in the future and decide on the investment.

Investors in the financial market try to act as rationally and prudently as possible when making investment decisions. An investor can use various data to create an initial "portrait" of a company if he invests in shares. He uses several methods, principles, indicators, and several analyses of financial instruments to determine whether the investment is reasonable in terms of expected return and risk.

Encouraging for a securities investor is the fact that company managers' presentations, which are often only available to capital analysts, do not contain as much novelty as to have a revolutionary impact on future stock price movements.

For a prudent investment, it may also be enough for the investor to study the data at his disposal at a given moment, which means that he relies primarily on his information base when making investment decisions.

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