IS GOLD AS AN ALTERNATIVE INVESTMENT
A GOOD SOLUTION DURING PANDEMIC?

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Abstract

The aim of the article: The crisis, both in the economic and financial markets, can lead to a sudden downturn and a loss of savings. For this reason, during a crisis, safe investments are essential to reduce risks and avoid losses. This year's coronavirus pandemic has caused a lot of confusion in the financial and investment world as well. The pandemic led to turbulence in the financial market and made investors look for the so-called safe havens. In the literature, these havens often include alternative investments with a high demand for gold. This article aims to check the validity of using gold as an investment during a pandemic.

Methodology: In the paper, in order to achieve the formulated aim, the following stages were carried out: critical analysis of the literature regarding the factors influencing investment decisions and the characteristics alternatives instruments. The last stage was based on statistical analysis using the Pearson correlation method. Gold prices were compared with quotations of two price indexes: WIG20 and S&P500.

Results of the research: The conducted analysis shows that gold as an alternative investment is a good hedge in times of crisis, therefore, it is also the case during ongoing pandemic. Alternative assets fulfill a hedging function, minimizing the risk of losses. Moreover, thanks to a negative correlation with the market, they give a possibility to increase investors' capital in times of crisis.

Keywords: alternative investments, gold, pandemic, safe havens.

JEL Class: G11, G41, Q02.

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INTRODUCTION

Investment is a growing phenomenon observed in the community. Saving money and then investing allows people to gain profit and multiply their capital. Investors have different financial needs and different expectations. Some of them invest to grow their capital, while some think about saving for retirement. However, one of the primary objectives is wealth maximization.

The crisis, both in the economic and financial markets, can lead to a sudden downturn and a loss of some of savings. For this reason, during a crisis, safe investments are essential to reduce risks and avoid losses. The uncertainty prompts investors to look for new, secure opportunities to grow their capital. Increasingly, in search of the so-called safe havens, investors shift their capital from the stock and bond market to the alternative investment market. Having them in portfolio, investors are able to continuously increase their capital while reducing risk. It is mainly because of a characteristic feature of alternative investments, which differs them from traditional asset class – the negative correlation of their rate of return with the profitability of other financial instruments. Gold is one of the most common alternative assets chosen by investors during the crisis. It is worth examining whether it really has protective functions in these difficult time of pandemic. In order to obtain an answer to the formulated question the following stages were carried out: critical analysis of the literature (factors influencing investment decisions), indication of the purpose of having alternative assets in the investment portfolio and the research stage. The last stage was based on statistical analysis using the Pearson correlation method.

1. FACTORS INFLUENCING THE INVESTMENT DECISION MAKING

Investors' behavior in financial markets depends on many factors. The most important ones include: socioeconomic factors, information sources, purposes of investment, psychological factors as well as the situation of economy and in financial markets.

Decision making process is a crucial part of choosing proper investment, which should takes into account all necessary circumstances. Fundamental factors are income–expense ratio, borrowing habit, disposable income and individual income of investor (Suyam Praba and Malarmathi, 2015). Another important economic factor is classical wealth (Ikeobi and Jat, 2016). A high level of classical wealth can make investors feel financially secure and give more room for maneuver. Decision-making process in investing also strongly depends on age, gender and education (Bhavan and Shetty, 2017). The age of the investor favors more risky investments, as young people usually do not have enough knowledge

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and capital. Young and old people are characterized by the lowest investment activity, because they do not take risks and do not have a stable income. The most noticeable activity is in the working age.When it comes to gender, in the literature it is often mentioned that women are more risk averse than men (Hibbert et al., 2008). Therefore, men are more likely to invest in risky assets.

The investor's objectives are also important. Every human being, and thus every investor, has different financial needs and different expectations of investing. Some of them invest to grow their capital, while some because of saving for retirement. However, one of the primary goals is wealth maximization.

Before making financial decisions investors gather and collect different information and opinions such as accounting information, current economic indicators, stock marketability or broker recommendations (Ahmad, 2017). In addition, investors also often obtain information from friends, family, colleagues, print and electronic media and then invest appropriately in the stock market (Akbar et al. 2016).

Among many factors there are also those of a psychological nature, which are most often described in the literature as behavioral biases. Behavioral finance describes behavioral biases, emphasizing that they influence the process of making investment decisions and they usually encourage investors to deviate from rationality and make irrational investment decisions (Madaan and Singh, 2019). This field of finance explains how and why emotions and cognitive biases create anomalies about stock market for investors. (Asab et al., 2014). Among the most frequently mentioned are confirmation bias, overconfident biases, familiarity biases, loss aversion and representative bias. Confirmation bias explains that investors seek out only the information that confirms and support their existing belief and ignore or avoid information that present different ideas (Verma, 2016). Focusing only on one side of view may result in a wrong investment decision. Overconfidence bias occurs when investors are very confident while investing and often overestimate their skills, knowledge and undervalue the risk (Malik et al., 2019). Familiarity bias is about having an inclination towards choosing investment that investor is familiar with, despite the obvious gains from diversification. Investors are more likely to choose local assets and portfolios titled toward domestic securities (Baker and Ricciardi, 2014). The result is that investors hold suboptimal portfolios. Loss aversion is a situation when an investor is so afraid of potential losses that thinks more about avoiding them than making gains. This bias usually occurs when the investor once made a wrong choice that resulted in a substantial loss. Representative bias is often described as a tendency to label an investment as good or bad based on its recent performance. It is evaluating something, on the basis of probabilities, but with reference to how closely it resembles something. It involves the classification of events, on the basis of one's experiences and knowledge (Konteos et al., 2018). Existence of behavioral

biases proves that investors are susceptible to emotions and that they sometimes take action based on feelings instead of facts (Baker and Ricciardi, 2014).

The other group of factors influencing investors' behavior are factors on the market side – the economic situation as well as a closely related situation in financial markets.

1.1. Crisis as an important factor determining the investment decision making

The economic situation has a large impact on the financial market performance and, to a large extent, it determines investors' attitude towards risk, the occurrence of specific behavioral biases, with more or lesser intensity. All these factors affect the financial decisions of investors. The experience of the financial market shows that there are some specific, typical investor behavior patterns in crisis situations. This kind of situation usually influences investors' level of trading, a choice of assets or a way of allocating capital. In times of crisis, investor perceptions fluctuate significantly.

In 2007–2009, during financial crisis, it was observed that risk tolerance and risk perceptions were less volatile than return expectations. During the worst days of crisis, investors' risk tolerance and return experience decrease, while their risk perceptions increase (Hoffman et al., 2013). When it comes to public and matched private firms, Florysiak and Goyal (2016) found that they significantly reduce their investments and financing. However, some of researches show that that these changes in investors' behavior are temporary and get back to normal quickly. Thus, investors continue to trade. It sometimes happens that investors consider the depressed asset prices as a chance to enter the market (Hoffmann et al., 2013). Kallberg et al. (2014) show that in times of crisis, individual investors are likely to lower their portfolio risk. By analyzing the portfolio of individual investors they find out that investors hold more stocks with a relatively lower risk and more liquidity. Their research also shows that investors were calm and reasonable in actions – shifted their portfolios into lower risk assets.

When an anomaly occurs in financial markets, it is often suggested to have certain assets in portfolio in order to limit losses and, if it is possible, to make a profit. Investing in the most traditional asset classes offer limited possibilities for portfolio diversification – changes in the prices of given assets are shaped in a dependent way. Analysts, taking into account cyclical or unexpected crisis situations, recommend specific alternative instruments in the portfolio. Having them in portfolio, investors are able to continuously increase their capital while reducing risk. It is mainly because of a characteristic feature of alternative investments, which dstinguishes them from a traditional asset class – the negative correlation of their rate of return with the profitability of other financial instruments.

2. GOLD AS AN ALTERNATIVE INVESTMENT

Alternative investments are a broad concept and there are many ways and attempts to classify them. The most common method to identify this type of investments is to state that they are different from traditional ones (Tomaszewski, 2013: 34). Typically, raw materials, works of art, real estate, collectibles and funds are considered as alternative investments. An investor who decides to raise their capital through alternative investments is not interested in what rates of return the market generates. Even if there is a bear market, they are expecting a return on the investment (Pruchnicka-Grabias, 2008:13). Thus, alternative investments might be a good solution during crisis situations.

One of the most popular investors' choices of alternative investments is gold. Gold is often considered to be one of the most important indicators in determining the health of the economy. The volatility in the price of gold can signal economic problems, especially when its price increases. The international gold price is based on the US dollar as the price scale (Qian et al., 2019). When a gold price increases, there is a fall in US dollar. As a result, during financial crisis many investors invest in gold to protect their investments. Even investment funds turn stock markets to gold ones (Alkhazali and Zoubi, 2020). Gold might be also used as a hedge against inflation. It holds its value even in times of economic slowdowns. It can be described as unique investment because of its characteristics. Gold is a precious metal which can act like a unit of value, source of wealth and a highly liquid asset. It has also industrial uses, can be converted into jewelry. Another factor that makes investments in gold attractive is the fact that the demand for gold, with the simultaneous decline in resources, grows. The value of gold is also determined by its historical significance. Gold has consistently retained its value since it was used as a currency. It played an important role in the development of the currency system, and gained a dominant position during the Gold Standard period (Mikita and Pełka, 2009: 173). However, investors should be aware of high trading and storing costs when making a decision to invest in gold.

Currently, the world is facing a pandemic, which has a large impact on the economic situation all over the world and, accordingly, on financial markets and decisions made by investors. They are trying to minimize losses and deal with problems in the best possible way. It is therefore, worth verifying whether alternative values would actually be a good solution. The analysis is carried out for one of the alternative assets – gold.

2.1. Gold analysis

In the first stage, the conditions for applying Pearson's R correlation were checked. The choice of Pearson's R correlation was dictated by the following conditions: the type of data, the measurement scale and the normality of the distribution of variables. For this purpose, the Shapiro-Wilk test and the Kolmogorov-Smirnow test (N <100)[1] were performed. The value of the correlation indicates the strength of the interdependence of the variables, which is understood as the degree of determination of the value of one variable by the values of the other variable (Jóźwiak, 1992: 214). This value is always in the range <–1; 1>. From the analysis of Pearson's R correlation, the results are as follows:

For S&P500_GoldUS_2020 $\qquad$ R = 0,721424 (p< ,0500)

For WIG_GoldPLN_2020 $\qquad$ R = –0,520012 (p< ,0500)

For S&P500_GoldUS_2000_2019 $\qquad$ R = 0,524345 (p< ,0500)

For WIG_GoldPLN_2000–2019 $\qquad$ R = 0,235219 (p< ,0500)

The correlation analysis shows significant differences between Poland and the United States. On the American market, the correlation of the S&P500 with gold is much stronger than the correlation of gold with the Polish WIG20 index. Based on this information it might be concluded that gold, as an alternative asset, is more suitable for the Polish market, because the characteristic feature of alternative investments is the lack of positive correlation with the financial market. The differences in the results of the correlation analysis for the United States and Poland result from the fact that despite the progressive globalization, the WIG20 and S&P500 quotations behave locally and do not always shape in the same direction, unlike gold PLN and gold US. There is a very strong correlation between gold PLN and gold US. There might be minimal differences in quotations due to the differences in exchange rates, but still gold deminated in two different currencies will always have a strong correlation.

When analyzing the correlations between the WIG20 and gold in PLN, in the period 2000–2019, there is no correlation (R = 0,235219), which confirms the rightness of calling gold a „safe haven". The turmoil in the financial market will not affect gold prices, which will allow investors to further increase their capital.

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[1] Test Shapiro-Wilka (N<100) for S&P500_GoldUS_2020 and WIG_GoldPLN_2020, test Kołmogorowa-Smirnowa ($N > 100$) for S&P500_GoldUS_2000_2019 and WIG_GoldPLN_2000–2019.

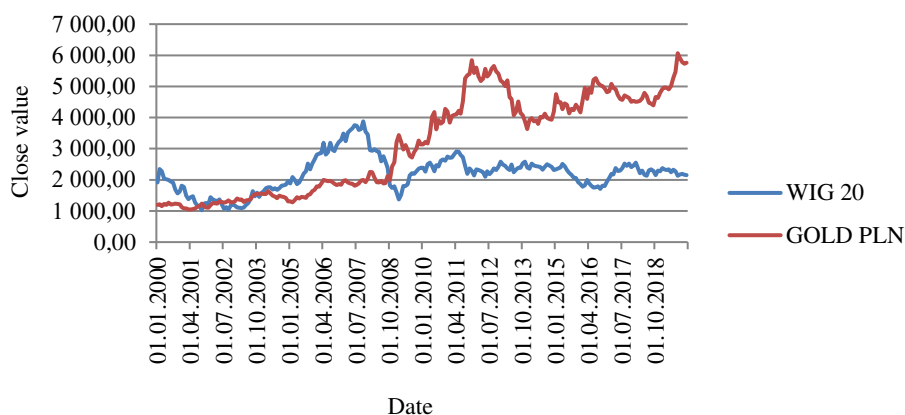Chart 1. WIG20 and GOLD PLN in 2000–2019 (monthly quotes)

Source: own study based on data provided by:
https://stooq.pl/q/d/?s=xaupln&c=0&d1=20000101&d2=20191231&i=m and
https://stooq.pl/q/d/?s=wig20&c=0&d1=20000101&d2=20191231&i=m

In 2020, there is a moderate downward (negative) linear relationship ($R = -0{,}520012$). The negative correlation indicates that an increase in the value of one feature is accompanied by a decrease in the average value of the other. This is the main feature that distinguishes alternative investments from traditional ones. Having alternative assets in your portfolio allows you to minimize losses and risk during a bear market.
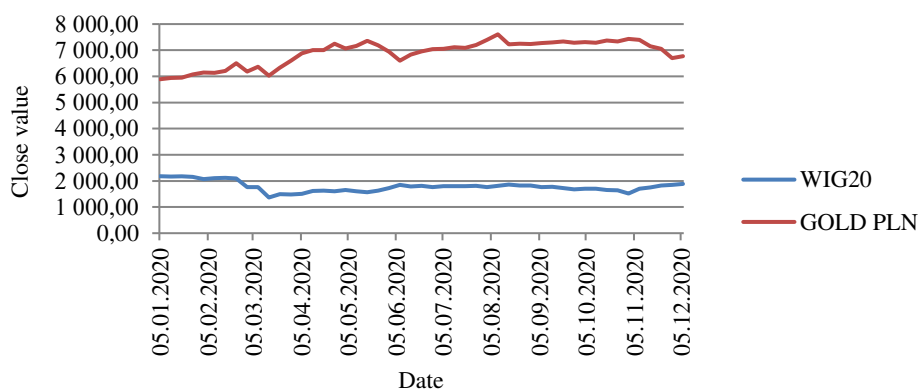

Chart 2. WIG20 and GOLD PLN in 2020 (weekly quotes)

Source: own study based on data provided by
https://stooq.pl/q/d/?s=xaupln&c=0&d1=20200101&d2=20201227&i=w and
https://stooq.pl/q/d/?s=wig20&c=0&d1=20200101&d2=20201231&i=w

In the years 2000–2019, a moderate upward linear relationship (R = 0,524345) can be observed between the S&P500 and gold quotations. Despite the positive correlation with the market and slight declines, the value of gold has increased significantly over the years.
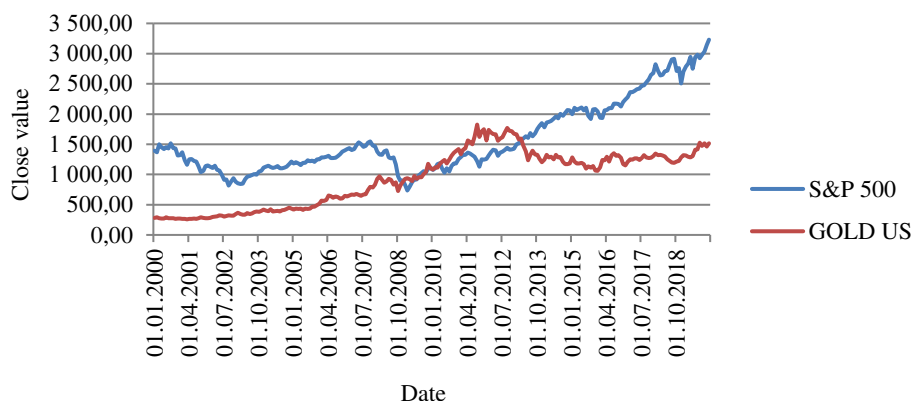

Chart 3. S&P500 and GOLD US in 2000–2019 (monthly quotes)
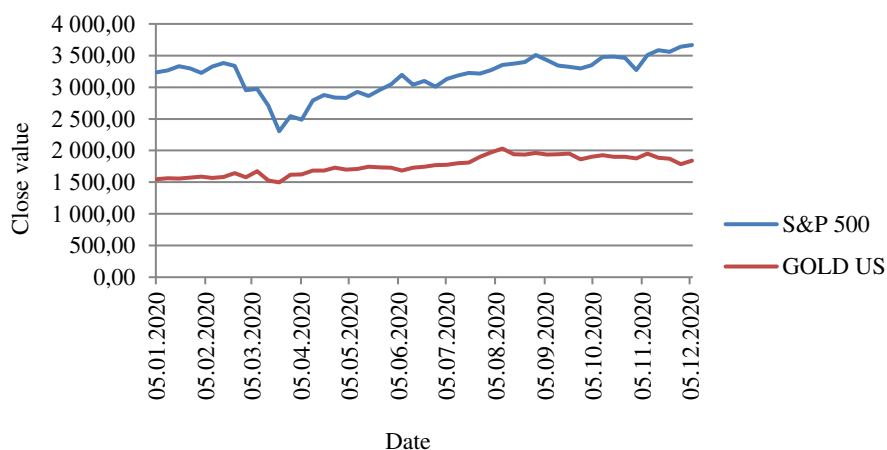
Source: own study based on data provided by
https://stooq.pl/q/d/?s=%5Espx&c=0&d1=20000101&d2=20191231&i=m and
https://stooq.pl/q/d/?s=xauusd&c=0&d1=20000101&d2=20191231&i=m

Chart 4. S&P500 and GOLD US in 2020 (weekly quotes)

Source: own study based on data provided by https://stooq.pl/q/d/?s=xau-usd&c=0&d1=20200101&d2=20201231&i=w and
https://stooq.pl/q/d/?s=%5Espx&c=0&d1=20200101&d2=20201229&i=w

In 2020, during thepandemic, the correlation increased to a significant level and amounted to 0.7. This high, positive value can mean that gold would not work as an alternative investment during this period, which is related toa short, only one year, investment horizon. The strong correlation is also due to the fact that in 2020, despite the crisis on the American stock market, growths were noticeable, parallel to the gold. Over the years, we have noticed that gold has proved to be an alternative value, since 2000 its value has been constantly increasing. The value of the correlation for the S&P500 and Gold US in 2020 is explainable and does not exclude gold as an alternative investment and indeed shows that even during a crisis its value continues to rise.

CONCLUSION

The conducted analysis shows that gold as an alternative investment is a good hedge in times of crisis, and therefore, also in times of the pandemic. When the financial markets go down, gold retains the characteristics of alternative investment and behaves the opposite – its price has been rising constantly since 2000. The year 2020 and the pandemic, which caused many unexpected and negative situations, such as the collapse of crude oil prices, also had positive effects. Despite the global crisis, there were visible increases in the US market. A negative correlation of gold with the S&P500 would mean a fall in gold prices and a loss of the hedging function. However, this is not the case – gold is also growing, and the positive correlation results from a short investment horizon. Furthermore, investors looking for alternatives to increase their capital during the crisis can definitely choose gold.

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