

SYSTEMATIC LITERATURE REVIEW ON GOLD INVESTMENT BEHAVIOR

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Abstract

The behavior of buying gold is different from buying other things, as many factors affect the motive of buying gold. The present study focused on the behavior aspect of gold investment behavior through a systematic literature review. The present SLR is divided into three themes. These themes are: Gold investment as a hedge and safe haven against inflation, gold investment behavior, gold price, exchange rate, and stock market. The theme first focused on the diversifying, hedging, and safe haven properties of gold. This proved gold and different gold avenues a safe haven and hedge and also can be used as the best portfolio diversifier during an economic crisis. The second theme gold investment behavior focused on factors that affect the behavior of investors. The last theme shows that the price of gold has continuously increased in the past. As there are many avenues for investing in gold. The price is rising rapidly. So, these themes help in analyzing the investment behavior of gold in different situations and different ways of investment.

Keywords: Systematic literature review, Gold investment behavior, Factors affecting gold buying, Gold Price & Stock market, Hedging and Safe haven, Exchange Rate

JEL Code: G11, G41, G53.

Introduction

Investment is a way to increase future income (Zakiah and Al-Aidaros, 2017). Investment is something that must be done by someone to plan future needs (Budiya Elsasari and Sukardi). Investing is an intentional strategy for making safe savings across various assets or portfolios to increase returns. Return is a key component of an investment's quality. (Hesniati and Lasmiyanto). Investments are made to profit efficiently (Cheshier *et al.*, 2009). There are different avenues for investment. According to Menakadevi *et al.*, (2021), Investment in gold is one of the easiest ways of investing and obtaining a high-return portfolio to get a better return. Information asymmetry and availability bias have a significant impact on investment decisions (Hesniati and Lasmiyanto). Gold portfolio diversity is also a safe haven during uncertain economic times (World Gold Council Report March 2024). Gold might be an effective tool for hedging bitcoin (Huynh *et al.*, 2020). Since gold offers consistent returns and a good chance to increase investor wealth, it plays a significant position in an investor's portfolio (Hesniati and Lasmiyanto). Investors ought to rebalance their investment portfolios by adding gold as a hedge against unanticipated changes in the price of Bitcoin (Huynh *et al.*, 2020). In times of great stress, gold is a tremendous safe haven against the stock market and an invaluable portfolio diversifier (Triki and Ben Maatoug, 2021). During the COVID-19 epidemic, gold served as a safe haven and protected investors from both financial and geopolitical threats (Atri *et al.*, 2021). However, according to Salisu *et al.* Real estate and stocks prove to be good hedges against inflation, while gold investment defies (Salisu *et al.*, 2020).

Considering the fluctuating state of the market and the unpredictable nature of rewards, gold is a rather secure investment (Taufiq Chodhary and Syed S. Hassan 2015). Religion has a favorable and large influence on gold investors' conduct, and financial knowledge may have a positive and significant impact on attitude. (*The Impact of Islamic Finance Knowledge*, n.d.). E-gold is considered a more secure investment option in political and financial unpredictability. It proves a hedge against inflation during the COVID-19 outbreak due to decreased household income, and stock market crash (Gurbaxani and Gupte, 2021). Gold presents an important role in an investor's portfolio because it provides stability for returns and favorable opportunities to improve investor wealth (Hesniati and Lasmiyanto, n.d.)

Choudhry, Taufiq et.al suggested that gold would not have been a suitable safe haven during the financial crisis because of the mutual relationship between gold returns and stock returns as well as the volatility of the stock market. Under stable financial conditions, gold can be utilized as a hedge against stock market returns and volatility. Gold is an inflation hedge asset that should have a negative market correlation and provide the greatest portfolio diversity (Fernando, n.d.). Vyas *et al.* (2020) focused on gold's potential as a tactical prophecy against currency rates and inflation. Also, it investigated whether gold has served as a hedge against India's currency rate fluctuations and inflation. However, there is something absent in the literature regarding the behavioral aspect of gold investment. The knowledge drive from literature is about the relationship of gold with the stock market anyway. There is no systematic review of the literature on gold investment and also there is a lack of evidence regarding gold investment that shows the social behavior of investors towards gold investment who do not know the stock market. So, there is a research question regarding the gold investment. The question is as follows "What type of behavior is adopted by investors and what is the motive while investing in gold". The article here presents a systematic literature review on gold investment behavior. The present study analyzed 53 articles extracted from the Scopus database in search of research questions. After screening 96 published articles 53 articles are found to be related to this systematic literature review. After analyzing the 53 articles it is found that some articles have abstracts only and some are not related to the research question of the present study. Only 47 articles that are related to the investment behavior of investors are included and others are excluded. There are four sections in the systematic literature review. (1) introduction and existing knowledge of the problem which helps in defining the research question (2) methodology used in screening data (3) analysis and results (4) conclusion and future directions.

Methodology

1.) Screening of Data

We use a multi-stage systematic literature review approach to find pertinent material because systematic literature reviews employ a scientific, reproducible, and transparent process that strives to reduce bias by conducting thorough searches of published and unpublished studies' literature and offering a detailed of the reviewers' decisions, methods, and conclusions (David Tranfield, 2003). Data screening contains the criteria for inclusion of research articles, search keywords, reporting format, analytic techniques, and article selection process. This process

starts with extracting files from the Scopus database. The next step is analyzing each article that satisfied inclusion criteria (based on keyword, publications, area, and language) as a transcript from an angle, a thematic analysis of article 47, and searching for intriguing concepts and passages. And this study obtained more comprehensive and complete insights into the elements of each article.

Screening Criteria

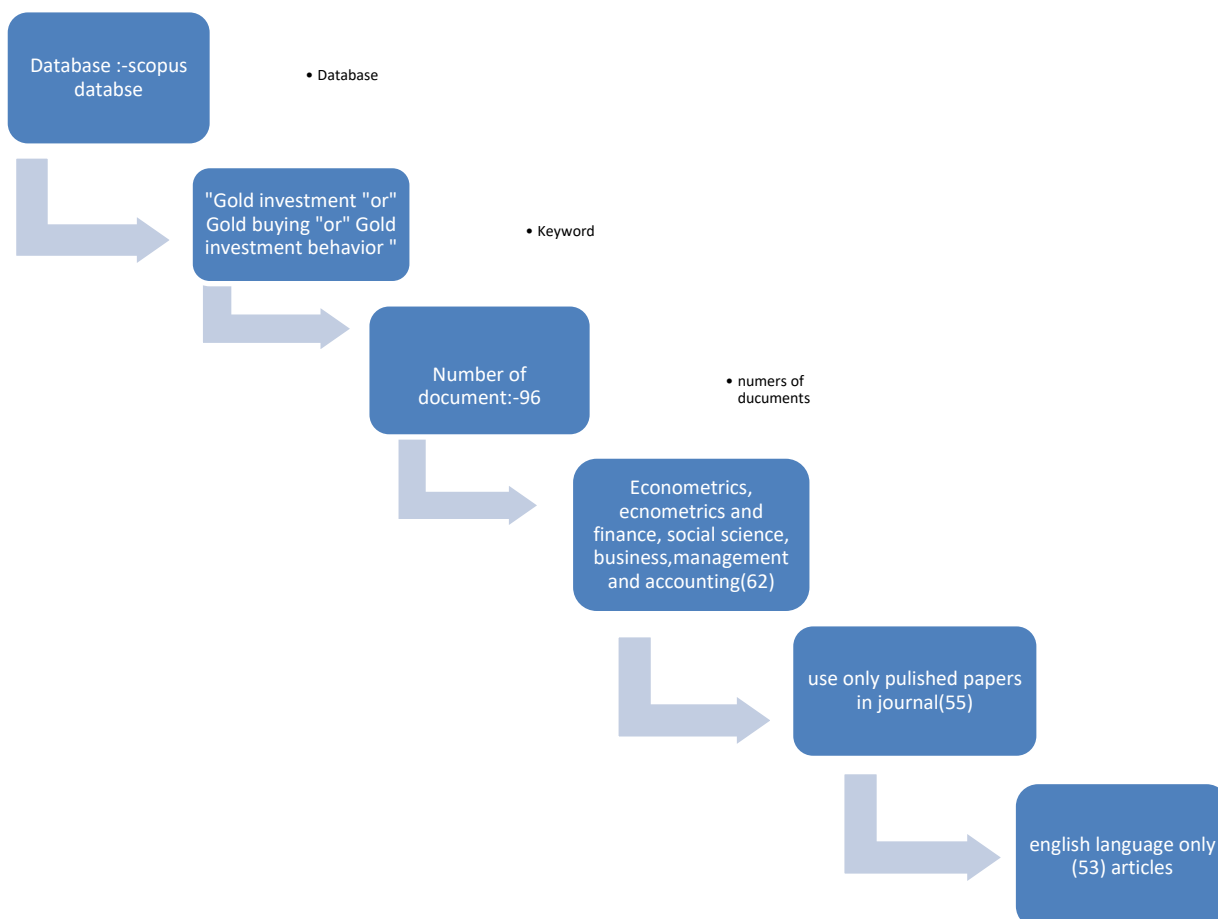


Figure 1. Screening Criteria

2.) Thematic analysis

Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data. It minimally organizes and describes the data set in (rich) detail. The theme highlights the significant aspect of the data related to the research question and represents some level of patterned response or meaning within the data set (Braun and Clarke, 2008). The present SLR is divided into three themes. These themes are: -

- i.) Gold Investment as a Hedge and Safe Haven against Inflation.

- ii.) Gold Investment Behaviour
- iii.) Gold Price, Exchange Rate, Stock market

Analysis and Results

The above-naming themes help in analyzing and elaborating the existing literature. These themes are analyzed by using Table 1, Table 2, and Table 3. The subheadings of tables are-theme numbers, theme name, country name, theory used, types of study, and methodology. After deep analysis of the article's information is cumulated in a table and then explained in detail.

Gold Investment as a Hedge and Safe Haven: -

There are 16 articles on gold investment 'as a hedge and safe haven'. All 16 articles focused on the features of gold as a hedge and safe haven. There is a table (i) that clarifies the objective of this theme. The table includes serial no., article name, country, theory & author name, types of study, and methodology. The most used methodologies in this theme are the augmented Dickey-Fuller unit root test, Johansen Cointegration test, Granger Causality test, vector error correction model (VECM), TVECM, Morlet Wavelet approach, GARCH, TGARCH, ARMA, Wald test. The theme includes all articles that explain or elaborate on the search for gold investment as a hedge and safe haven. Hedge and safe haven are two different features of investment. Baur and Lucey (2010) define an asset as a hedge if on an average base an asset is uncorrelated or negatively correlated with another asset or portfolio on the contrary, during periods of market stress or volatility, a safe haven is described as an asset that is uncorrelated or negatively associated with another asset or portfolio. Investment opportunities during unstable times or economic stress are often called a safe haven (Baur and McDermott, 2010). Hood and Malik (2013) agree with Baur and Lucey's statement, that gold has proved as a hedge and safe haven instrument in the US stock market recessions. They used the regression model forwarded by Baur and McDermott (2010). Ghazali *et.al*, (2020) explains that gold functions as a safe haven and continues to be a valuable investment, especially in nations like India gold shows clear signs of being a robust hedge in the US and India, as well as having a varied function in China. In contrast, gold is mostly irrelevant in developing economies such as Malaysia. They also concluded that the present (COVID-19) global financial crises have raised investor demand for gold in the past 17 years. Pullen *et al.*, (2014) are focused on the diversifying, hedging, and safe haven properties of gold bullion, gold stocks, gold mutual funds, and gold exchange-traded funds (ETFs). They describe a diversifier as an asset whose returns, on average, are positively correlated but not completely associated with the returns of another asset or portfolio. An asset is considered strong (weak) if its average returns are negatively linked (uncorrelated) with the returns of another asset or portfolio. An asset having returns that are negatively linked (uncorrelated) with returns on another asset or portfolio at certain times of market stress or upheaval is referred to as a strong(weak) safe haven. They concluded in their study that gold bullion has more hedging properties while gold stock, gold mutual fund, and gold ETF have portfolio diversifiers, and gold bullion and gold ETF show more safe haven properties than the gold stock and gold mutual fund. Ibrahim. *et al.*(2011) analyze that gold is a potential substitute and serves as a haven, simultaneously serving as an

asset's diversifier and hedge during severe market downturns or market risk. Ghazali. et al., (2019) explain that gold is a strong hedge in the US and India at all time and also play the function of a safe haven, especially in India where gold is deeply ingrained in the culture. Gold can prove well-diversified for Chinese investors to provide steady profits and hedge against a stock market meltdown. Singh & Joshi (2019) imply that investing in gold can act as a hedge against inflation. Using Johansen's cointegration technique, they examine the long-term equilibrium between gold and inflation (measured by the consumer price index [CPI]). Ibrahim & Baharom, (2011) also examined the usefulness of gold as a safe haven, hedge, or diversifier for stock market investors in connection with stock market returns. According to them, gold is a safe haven during severe market downturns, a diversification asset, and a hedge against stock market risk. R Panda & Sethi, (2016) According to them Indians are selecting gold as a safe haven for their investments. They analyze whether India's preoccupation with yellow metal is real or just a myth. They report gold as an investment option for Indian investors and examine four common Indian misconceptions regarding gold: (a) gold as a hedge against inflation; (b) gold as a desirable alternative to fixed income investments; (c) gold as a less risky investment than stocks; and (d) the impact of rupee-dollar exchange rates on the returns on gold investments. Shehzad *et al.* (2021) investigated the ratio of gold to bitcoin and compared the safe-haven properties of gold in contrast to bitcoin during the COVID-19 downfall. They discovered that, for the most part, gold investments outperformed bitcoin during COVID-19. Ghazali M. F. *et al.*(2014) examine the relationships between domestic stock and gold returns that are both constant and time-varying. One noteworthy discovery is that, in comparison to the usage of Islamic gold accounts, Malaysia's official gold standard can serve as a robust hedge. However, domestic gold—and especially Islamic gold accounts—performs poorly as a safe haven during periods of sharp declines in the stock market. They also demonstrate that gold is not a significant factor during Malaysian stock market downturns. However, they observe that the official gold standard outperforms the gold account. Zafar & Yasmin,(2015) reported support for gold as a potential hedge against inflation. The time-varying connection between the variables is examined by using an autoregressive moving average (ARMA) with generalized autoregressive conditional heteroscedasticity (GARCH) models. Using gold as a possible inflation hedge the profits on gold investments surpass the costs associated with holding them to influence predicted inflation, gold is a useful hedge against inflation in Pakistan. The study also shows that gold, which is more beneficial than other interest-bearing assets, can play a significant role in the potential for Islamic finance. Afham *et al.*(2017) applied the Johansen cointegration that results in the consumer price index and gold price having a long-term association. Gold has a track record of being a successful inflation hedge, albeit its efficacy fluctuates depending on the price momentum during high momentum regimes. According to Sarac and Zeren, (2014), most investors view gold as a "safe haven" because of its steady long-term trend. Sarac and Zeren demonstrate that gold is a useful investment tool to protect against inflation and currency risk using the new generation Kapetanios (2005) unit root and Maki (2012) cointegration tests. They conclude that gold should always be a part of a well-diversified portfolio. Shahbaz. *et al.*(2014) used the innovative accounting method (IAA) and the ARDL limits test approach to investigate the direction of causation in variables. They concluded that gold investments are a solid short- and

long-term hedge against inflation. Chua and Woodward, (1982) analyzed how well gold has protected investors in six major industrialized nations (Canada, Germany, Japan, Switzerland, the United Kingdom, and the United States) against both predicted and unexpected inflation. The efficiency of gold as a hedge against inflation will differ from nation to nation. Investing in gold has shown to be a successful strategy to combat inflation. Only in the United States has gold proven to be an effective inflationary hedge; the other five countries have not. Anoruo, (2019) examined the causal link between gold and return from real estate investment trusts (REITs). He investigated whether gold might be used as a hedging strategy against changes in REIT returns by using the nonparametric causality-in-quantile technique. He discovered that investing in gold may act as a hedge against REIT market volatility and vice versa. The findings offer convincing proof of asymmetric and bidirectional causality-in-variance between REIT returns and gold. (Salisu, 2020) compares the ability of equities, gold, and real estate to hedge against inflation. Both the Bivariate and Multivariate Modeling frameworks are used to generate the Fisher hypothesis for asset-inflation hedging. The findings demonstrate that different assets have different inflation-hedging tendencies. While gold investments defy Fisher's premise, equities and real estate turn out to be effective inflation hedges. Thus, in this theme, most of the authors explain gold has a safe haven and hedging properties.

Table -I Gold Investment as a Hedge and Safe Haven against Inflation

Theme	Gold Investment as a Hedge and Safe Haven against Inflation	Country	Theory & authors	Types of study	Methodology
1	Gold as a Strategic Prophecy against Inflation and Exchange Rate	India	A. Patel S.	secondary	Augmented Dickey-Fuller unit root test, Johansen Cointegration test, and Granger Causality test in Error Correction Model framework
2	Can gold investment provide a hedge against inflation and exchange rates? Evidence from a former Gold Coast	Ghana	Musah A.; Ibrahim M.	secondary	unit root testing, Johansen multivariate cointegration test procedure, and vector error correction model (VECM)
3	A comparative analysis of the investment characteristics of alternative gold assets	Sydney	Pullen T.; Benson K.; Faff R.	secondary	GARCH
4	Does gold investment offer protection against stock market losses? evidence from five countries	US, India, China and UK	Ghazali & et.al, 2020	secondary	time-varying conditional variance of the regression residuals based on the TGARCH

5	Investigating Gold Investment as an Inflationary Hedge	India	Singh N.P.; Joshi N.	secondary	vector error correction model (VECM) and Wald test.
6	The role of gold in financial investment: A Malaysian Perspective	Malaysia	Ibrahim M.H.; Baharom A.H.	secondary	
7	Gold as an investment option in India: Myth and reality	India	R. Panday & M. Sethi	secondary	simple statistical analysis
8	Sharia-compliant gold investment in Malaysia: Hedge or safe haven?	Malaysia	Mohd Fahmi Ghazali et al.	secondary	time-varying relations
9	Evaluation of gold investment as an inflationary hedge in the case of Pakistan	Pakistan ²	Sadaf Zafar & Attiya Yasmin Javid	secondary	an autoregressive moving average (ARMA) with generalized autoregressive conditional heteroscedasticity (GARCH) models
10	Is gold investment a safe haven or a hedge for Malaysian inflation?	Malaysia	M. S. M. Khair-Afham et al.	secondary	Johansen cointegration threshold vector error-correction model (TVECM)
11	Gold as inflation on hedge: A comparative study of six major industrial countries	US	J. Chua, R.S. Woodward	secondary	The simple statistics
12	Is gold investment an effective hedge against inflation and the U.S. Dollar? Evidence from Turkey	US	Mehmet Saraç, Feyyaz Zeren	secondary	Kapetanios (2005) unit root and Maki (2012) cointegration tests
13	Is gold more favorable than bitcoin during the COVID-19 outbreak? Comparative analysis through wavelet approach	US	Khurram Shehzad et al	secondary	Morlet Wavelet approach
14	Is gold investment a hedge against inflation in Pakistan? A co-integration and causality analysis in the presence of structural breaks	Pakistan	Muhammad Shahbaz et al.	secondary	ARDL bounds testing approach, accounting approach (IAA)

15	Asymmetric causality analysis of the interactions between gold and REIT returns	US	Anoruo, (2019)	secondary	nonparametric causality-in-quantile approach, nonlinear Granger causality test
16	The inflation hedging properties of gold, stocks, and real estate: A comparative analysis	US	Salisu A.A et.al.	secondary	bivariate and multivariate modeling

Theme 2: - Gold Investment Behavior

The behavior of buying gold is different from buying other things, as many factors affect the motive of buying gold. This theme includes 15 research articles that focused on the behavior aspect of gold investment behavior. Table (ii) shows the details of these 15 articles, title, authors, and methodology. The gold buying decision is based on many factors that affect the investing behavior of gold investors. According to Arekar and Godbole, (2014), there are six significant factors—opinions, market knowledge, benefits, security, and motives that affect investors' purchasing decisions. He also concluded that age and gender primarily decide the risk-taking capacity of the investors. Wahab, (2020) includes gold investment literacy in v his study by utilizing the Theory of Planned Behaviour. Potential influences on intention to invest in gold include attitude, subjective norms, perceived behavioral control, and literacy. Due to the emergence of new options in gold investment products, people's interest in gold investing has increased. According to Najahudin and Siti Noorbiah (2020), Shariah advisory councils are a part of the activities of investment institutions. I-PEPS is available to the public and institutions for use as guidance for choosing or preparing shariah-compliant gold investment products. They emphasize the item compliance level in the instrument, and the collected data were examined by using the Persons-Items Distribution Map (PIDM) function and the Rasch Measurement Model. Isani binit, (2013) investigated whether Malaysian gold investing activities comply with shariah and what that means for consumers. The parameters for gold investing and the Shariah judgments on gold transactions were examined throughout the debate. According to his study's findings, financial institutions that deal in gold investments must still abide by Shariah laws and guidelines to guarantee the security of their transactions and customer fairness. The process of developing the Shariah-compliant Gold Investment (SCGI-i) instrument was summarized by Lateh *et al.* (2017), who used both the Classical Delphi Technique (CDT) and the Fuzzy Delphi Method (FDM). Juisin et al., (2023) investigate the factors influencing SGI behavior using the Islamic theory of consumer behavior (ITCB). After the survey was distributed, partial least square structural equation modeling was used. He sheds light on the important influences of Iman, Islamic altruism, maqasid consumer index, and integrated religious pleasure on investors' behavior toward Shariah gold inside the framework of the ITCB. According to Husniyah *et al.* (2022), gold is stable in an unstable economy, it is one appealing investment option. The knowledge factor for gold investments was incorporated into this study along with the Theory of Planned Behavior. The probable characteristics that have the most impact on gold investing behavior are those that are deemed

significant, including financial risk tolerance, knowledge about gold investments, attitude, subjective norms, perceived behavioral control, and intention. The study employed multi-stage random sampling to choose urban public sector workers in Peninsular Malaysia. Intention to invest in gold acts as a mediator between attitudes and perceived behavioral control. Meanwhile, gold investment subjective norms, gold investment intention, and employees' financial risk tolerance directly impact gold investment behavior. Knowledge of gold investments, however, has little effect on intentions or actions related to gold investments. The knowledge of these key determinants of gold investment may be included in programs designed to enhance workers' financial security. Additionally, Lateh *et al.*, (2020) outline the procedure for evaluating the legitimacy and dependability of a novel tool called Shariah Compliant Gold Investment (SCGI). They used the Rasch model to demonstrate the acceptability and excellent reliability of three aspects of SCGI which are (i) investors and investment institutions; (ii) products and pricing; and (iii) the contracts offered.

A cooperative approach to artisanal and small-scale gold mining in Zambia is explained by Banda and Chanda (2012). The three main goals of the strategy are macroeconomic stability, poverty alleviation in regions with gold resources, and the formalization of the ASGM industry. The main differences and parallels between the various gold investment account types provided by the Islamic bank Kuwait Finance House, Berhad (KFH) and the conventional bank Maybank Berhad are noted by S. F. (2013). He conducts semi-structured interviews with bankers who have firsthand knowledge of how these institutions operate. He concluded that in comparison to Maybank Berhad, the KFH gold investment account is the better choice since gold is a topic that comes up throughout the depositor-bank transaction. Rafalovich, (2011) examines the substance of comments made by gold investors, or "gold bugs," during the year 2007. He studies the gold bug discourse as a conspiracy theory with the critique of inflationary monetary policy at its core. Since gold is the only "true" store of value, proponents of "gold bugs," foresee a rapid decline in the value of fiat currencies worldwide and a dramatic increase in the price of gold. Nordin, (2015) Investing in gold is a prudent way to preserve financial stability, particularly in light of the uncertainty and global economic downturn. He concluded that investing in gold was a wise way to preserve financial stability, particularly during the Great Depression.

Nurhalizah *et al.*, (2022) contrast a nation's laws with those of other Islamic nations. Since gold is a kind of usury property and contains 'illat as a unit of price or method of payment, the Saudi Arabian fatwa institution issued a fatwa prohibiting the purchase and sale of gold in futures. Since gold is now not a price but rather a common commodity or product, the National Sharia Council of the Indonesian Ulema Council issues a fatwa governing the permissibility of purchasing and selling gold in cash or futures. Since there is no clear scripture on the subject, the debate over buying and selling gold falls within the category of *ijtihad*, which is inextricably linked to disagreements. Mat Zain (2014) said among the numerous assets, gold is a valuable asset. It is desired and stored as a backup in case it is needed. Gold may be invested through banks and businesses that sell gold items, in addition to influencing a typical transaction. Islam offers a wide range of gold investment options, including buy-and-sell, mortgage, *mudabah*, and similar schemes. In addition, Islam has established particular laws and regulations that they

must follow while dealing in gold and silver. Even if the transactions entail investments in gold dinar, the E-Qirad corporation is not an exception in this respect. Even if E-Qirad's investment generally satisfies Islam's mudarabah standards in terms of capital, namely gold dinar, However, the public still doesn't fully understand some things, particularly when it comes to how capital is handled for the items that are supplied. (AMIN, 20216), which is pertinent to give Islamic banks fresh perspectives on what influences Muslim male investors' choices to open Islamic gold investment accounts. This study broadens the theory's scope to encompass Islamic gold investment accounts and increases the TRA's (the Theory of Reasoned Action) applicability in the present situation.

Table -II (Gold Investment Behaviour)

Theme 2	Gold Investment Behaviour (10)	Country	Theory& authors	Types of study	Methodology
1	Gold investment intention among urban public sector employees in Malaysia	Malaysia	Planned behavior theory, Ahmad Fauzi Abdul Wahab et al.	primary	Multiple regression analysis
2	Gold dreams, gold nightmares: The social construction of inflation as delegitimation discourse	US	Rafalovich	secondary	statistical tool
3	Understanding of gold investment among Muslim professionals in Terengganu, Malaysia	Malaysia	Nadhirah Nordin et al	primary	statistical tool
4	A study of factors influencing gold investment decisions of retail customers in India	India	Arekar & Godbole	primary	statistical tool
5	Analisis Profil Pelaburan Emas di Malaysia Menggunakan Model Persons-Items Distribution Map (PIDM) Rasch	Malaysia	Najahudin, L., Siti Noorbiah, M.R.	primary	Rasch Measurement Model
6	Determinants of Shari'ah gold investment behavior: the case	Malaysia	Islamic theory of consumer behavior (ITCB)(Juisin et al.)	primary	using partial least square structural

	of Penang, Malaysia				equation modeling
7	Malaysian Public Sector Employees' Gold Investment Intention as a Mediator in Gold Investment Behaviour	Malaysia	Planned behavior theory, Husniyah et al.	primary	structural equation modeling
8	Shariah analysis on the operation of gold investment in Malaysia and its implications for the consumer	Malaysia	Isani binit	primary	simple statistical analysis
9	Applying the fuzzy Delphi method (FDM) to analyze the expert consensus values for the instrument of shariah-compliant gold investment	Malaysia	Lateh et al.	primary	fuzzy Delphi method (FDM)
10	A proposed cooperatives strategy for artisanal and small-scale gold mining sector in Zambia	Zambia	Banda & Chanda	secondary	comparative analysis
11	Gold investment account in Kuwait finance house (M) berhad and maybank berhad	Malaysia	Syed Alwi, S. F	primary	qualitative method
12	Future Gold Commodity: Indonesian Ulema Council Vs Lajnah Daimah lil Buhuts al-'Ilmiyyah wal Ifta	Indonesia	Nurhalizah et al. (2022)	secondary	simple statistical analysis
13	Gold investment application through mudarabah instruments in Malaysia: Analysis	Malaysia	Mat Noor Mat Zain et al.	secondary	textual analysis method was used for the analysis of past data

	of gold dinar as capital				
14	Willingness to open Islamic gold investment accounts	Malaysia	Theory of Reasoned Action (TRA)	primary	partial least squares (PLS) analysis
15	Assessing item validity and reliability of shariah-compliant gold investment (Scgi) instrument using Rasch measurement model	Malaysia	Najahudin Lateh et al.	primary	point measure correlation, Rasch Measurement Model

Theme -3 Demand for Gold and Its Price

This theme includes articles related to the demand for gold, gold Price, exchange rate, and stock market. 16 articles focused on the demand for gold and explained the relationship between gold price, exchange rate, and stock market. Table (iii) shows the title, author, and methodology of these 16 articles. When compared to alternative gold investment options, gold bullion almost always produces superior portfolio risk-adjusted returns, according to Emmrich and McGroarty (2013), who also determined that gold investment proved to be the best investment during a market downturn.

Edwards (2017) examined whether the dollar's convulsion was high or low after 1933 and discovered that volatility did not increase after 1921. He takes advantage of the dollar, pound, and dollar franc exchange rates, which are very frequent. According to Ibrahim M. H. (2012), there was a more fragile beneficial association between gold investment and the stock market during periods when the stock market was down. Merwe (2012) asserts that there is no connection between the price of gold and miners' knowledge. Due to financial constraints and insecurity, miners are unable to wait for local prices to recover during the COVID-19 pandemic. They also have limited knowledge of global gold prices, which makes it difficult for them to get financing and boost trade opportunities.

According to Tassel (1979), the price of gold has increased since 1975. The basis for the effects of financial investment is created by rising new gold prices. The real value of gold is expected to be higher than inflation. An outline of the institutional shifts that have influenced artisanal gold mining in Burkina Faso from the middle of the 1980s to the present is provided by Werthmann (2017). Gold is the most stable among all the precious metals, according to (S, 2022). markets other than gold, which implies that investors may earn profit from diversification and steadily boost the returns on their gold investments by going short. According to M.H. (2022), investing in gold may be advantageous at times when the stock market is down. Designing financial investment portfolios should benefit from the findings.

Ferry (2016) examines the material and semiotic embeddedness effects of gold pricing and how they relate to other facets of gold mining and investing. The mechanisms outlined are more intricately linked to the mines than they may seem; they circulate and interfere in ways that are invisible or that are only apparent to specific actors and from specific viewpoints. Corporate community relations are part of the realm where gold prices function as material-social actors in interconnected markets. (Swamy , 2023) investigates the correlation between Twitter sentiment and gold by using wavelet analysis on daily data from September 2008 to April 2019. According to him the sentiment on Twitter can predict the price of gold. Jain & Jaiswal, (2023) according to them gold is always chosen ahead of paper money They analyse the correlation between crises and gold prices. They proved gold might be a lifesaver in times of global disaster, such as the COVID-19 pandemic. It also does a comparison analysis of gold returns over the past ten years concerning inflation and equities market returns. Lastly, policy comments and other gold investment choices round up the analysis. On the base of analysis by Worthington & Pahlavani (2007) gold may be used as a beneficial inflation hedge between the years following World War II and the 1970s. The existence of a steady, long-term correlation between the price of gold and the rate of inflation is necessary for gold's ability to hedge against inflation. Chen (2014) a crucial component of central banks' monetary reserve portfolios is gold reserves. To determine who sustains the rising price of gold, this study concentrated on the gold holdings of central banks. Globally, central banks' overall gold holdings are steadily declining, especially in prosperous nations and the central banks of recently industrialized nations' gold holdings demonstrate their considerable ability to explain the causal relationship between changes in the price of gold. Kallinterakis and Charteris, (2021) evaluate the influence of the global financial crisis on the coin's worth and whether feedback trading interacts with other variables. Due to the crisis, increased demand from outside markets boosted the coin's value and made trading more difficult for South African individual investors. However, it emitted after the crisis, most likely as a result of increased foreign demand that boosted the coin's value and made trading more difficult for South African retail investors. Investors have to pay more attention to the coin's worldwide demand and less attention to past price trends.

Hamori and Miyazaki (2013) use Hong's (2001) article on non-uniform weighted cross-correlations to examine the causal linkages between the gold return and stock market performance or uncertainty. As a result, there is no long-term transmission of volatility between the two markets. Wei Fan and others, (2014) The macro-factors influencing the gold price model under the existing currency system are examined in this article. Therefore, they break down the value of gold into three components: the commodity value, the currency value, and the hedging value, taking into account the commodity, currency, and hedging features of gold. The price of gold is significantly influenced by the US Treasury CDS spreads and the CRB index has a positive correlation with the price of gold, but the USDX index has a negative correlation. The US Treasury CDS spreads, the USDX index, and the CRB index are chosen as the macro-factors influencing the price of gold during the financial crisis.

Table -III Demand for Gold and Its Price

Theme 3	Gold Price, Exchange Rate, Stock market	Country	Theory & authors	Types of study	Methodology
1	Should gold be included in institutional investment portfolios?	US	Ole Emmrich and Francis Joseph McGroarty	secondary ,2013•Taylor & Francis	descriptive statistics along with updating and extending Jaffe (1989)
2	Keynes and the dollar in 1933: The gold-buying program and exchange rate gyrations	Keynes (2017)	Sebastian Edwards	Secondary	Markov switching regressions
3	Financial market risk and gold investment in an emerging market: The case of Malaysia	Malaysia	Mansor H. Ibrahim	secondary	TGARCH/EGARCH correlation between gold and once-lagged stock returns
4	Rising Gold Prices but Lower Incomes for Gold Miners: Evidence of Market Imperfections from Burkina Faso During COVID-19	Burkina Faso (west Africa)	Antoinette van der Merwe, Fritz Brugger, Isabel Günther	primary	descriptive statistics
5	New Gold Rush	US	Roger C. Van Tassel	secondary	descriptive statistics
6	The drawbacks of privatization: Artisanal gold mining in Burkina	Burkina Faso (west Africa) also called gold cast in the past	Werthmann K.	secondary	descriptive statistics

	Faso 1986–2016				
7	Price Stability Properties and Volatility Analysis of Precious Metals: An ICSS Algorithm Approach	US	Fatima S.; Gan C.; Hu B.	secondary	ICSS algorithm along with the GARCH model
8	Financial market risk and gold investment in an emerging market: the case of Malaysia	Malaysia	Ibrahim M.H.	secondary	TGARCH/EGARCH
9	Gold prices as material-social actors: The case of the London Gold Fix	London	Elizabeth Ferry	secondary	wavelet analysis
10	Does happy Twitter forecast gold prices?	US	Vighneswara Swamy M.A. Lagesh	secondary	wavelet analysis
11	Dynamics of Gold in the Contemporary Era	India	Megha Jain & Saurabh Jain Swal	secondary	descriptive statistics
12	Gold investment as an inflationary hedge: Cointegration evidence with allowance for endogenous structural breaks	US	AC Worthington &M Pahlavani	secondary	unit root testing, modified cointegration approach

13	Who upholds the surging gold price? The role of the central bank worldwide	China	Ku- Hsieh et al.	secondary	generalized autoregressive conditional heteroscedasticity (GARCH)
14	Feedback trading in retail-dominated assets: Evidence from the gold bullion coin market	South Africa	Ailie Charteris & Vasileios Kallinterakis	secondary	simple statistical tool
15	Testing for causality between the gold return and stock market performance: Evidence for 'gold investment in case of emergency'	Japan	Takashi Miyazaki & Ahigeyuki Hamori	secondary	unilateral causality, bidirectional causality
16	Macro-factors on gold pricing during the financial crisis	US	Wei Fan et al.	Secondary	EGARCH model, VAR model

Conclusion

The present systematic literature review is divided into three themes. The theme first focused on the diversifying, hedging, and safe haven properties of gold bullion, gold stocks, gold mutual funds, and gold exchange-traded funds (ETFs). All studies included in this theme prove that gold and different gold avenues proved to be a safe haven and hedges and also can be used for the best portfolio diversification during the economic crisis. A diversifier is an asset whose returns, on average, are positively correlated but not completely associated with the returns of another asset or portfolio at certain times of market stress or upheaval. And also concluded gold bullion has more hedging properties while gold stock, gold mutual fund, and gold ETF have portfolio diversifiers, and gold bullion and gold ETF show more safe haven properties than the gold stock and gold mutual fund. The second theme gold investment behavior explains the factors that affect the behavior of investors. Financial risk, literacy, security, the motive of investment, age, gender, etc. are the main factors of investing behavior. The behavior of Islamic

countries related to gold investment is also analyzed and different factors affect the investing behaviour. The last theme analyzed is that the price of gold has continuously increased in the past, in normal conditions the price tends to rise normally but in the case of the financial crisis, it rises at greater speed. No doubt that the price is based on the demand and supply of commodities. But in case of gold demand is continuously increase, at the time of crisis its demand is greater than other security. There are many avenues for investing in gold. The price is rising rapidly. So, these themes help in analyzing the investment behavior of gold in different situations and different ways of investment.

Future Directions

The behavior of buying gold is different than buying other things, as the motive behind it is an investment. The present study focused on the behavior aspect of gold investment behavior through a systematic literature review. Many areas are unexplored by researchers. After analyzing the literature, it is clear that the gold investment behavior of investors is based on the gold price, and the trends in the market such as the stock market, gold ETFs, gold mutual, and other gold securities. There is a lack of literature that explains the buying behavior of an individual. The scholar has an opportunity to explore the factors that directly and indirectly affect the buying and investing behavior of investors. There may be different motives for buying gold and its future perspective of buying gold. So, the present study helps in analyzing the future direction regarding gold investment behavior in different aspects of investors.

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