Financial Risk and Management:
An International Journal
Volume 4, Number 1, 2025

The Effect of Safe-Haven Assets on Mitigating Crisis-Period Financial Risk

Nurhaliza Nitswat[1]

[1] Universitas Negeri Makassar, Makassar, Indonesia

Abstract

Article history:
Received: February 4, 2025
Revised: March 29, 2025
Accepted: May 11, 2025
Published: June 30, 2025

Keywords:
Asset Allocation,
Crisis-Period Financial Risk,
Risk Mitigation,
Safe-Haven Assets,
Sustainable Finance.

Identifier:
Zera Open
Page: 29-41
https://zeraopen.com/journal/frmij

This study conducts a systematic literature review of research published between 2019 and 2024 on the role of safe haven assets in mitigating financial risk during crisis periods. It synthesizes evidence on traditional instruments such as gold, sovereign bonds, and reserve currencies, as well as alternative assets including cryptocurrencies, commodities, and green bonds. The review highlights that safe haven performance is highly context dependent, varying across asset classes, crisis episodes, regions, and investment horizons. Gold and high-quality government bonds generally provide the most reliable protection against severe equity market stress, whereas cryptocurrencies behave mainly as speculative assets that offer, at best, weak or episodic crisis insulation. Evidence on green bonds and other sustainable assets indicates promising but mixed protective properties that depend on market depth and the nature of the shock. The findings emphasize that investors and policymakers should treat safe haven status as conditional and dynamic, designing crisis resilient portfolios through diversified, asset specific strategies rather than relying on any single refuge across markets and risk regimes.

1. Introduction

Safe-haven assets have gained renewed attention as recent waves of market turmoil expose the vulnerability of traditional portfolios to extreme downside risk. During stress episodes such as the COVID-19 pandemic and geopolitical shocks, investors rebalance away from risky assets toward instruments expected to preserve value, generating flights to quality between equities, bonds, and other refuges (Papadamou et al., 2021; Gubareva et al., 2023). Although the notion of a safe haven is intuitively appealing, recent crises show that not all candidate assets consistently deliver protection, raising questions about which assets truly mitigate crisis-period financial risk and under what conditions (Khamis & Aassouli, 2023; Feder-Sempach et al., 2024). These developments have intensified the need to understand how safe-haven assets operate not only at the level of individual portfolios but also in relation to broader financial stability.

A growing empirical literature examines the safe-haven performance of traditional assets such as gold, government bonds, and reserve currencies, as well as newer instruments including cryptocurrencies, crude oil, and green bonds. Evidence from the COVID-19 shock generally confirms gold's role as a safe haven for equities and oil, while portraying Bitcoin more as a diversifier or weak haven with time-varying properties (Dutta et al., 2020; Wen et al., 2022). Studies for emerging and regional markets show that cryptocurrencies and precious metals may only partially shield local investors from stock market stress, with effectiveness depending on market depth, exchange rate regimes, and regulation (Omane-Adjepong & Alagidede, 2021). Recent work extends the analysis to conflict-related and multi-

crisis settings, documenting heterogeneous safe-haven behavior across assets and crisis types, including health shocks, wars, and monetary tightening (Feder-Sempach et al., 2024).

Methodologically, the literature spans a wide range of econometric and risk modeling approaches, including time–frequency analyses, regime-switching models, copula-based dependence structures, and tail-risk measures designed to capture extreme co-movements between safe havens and risky assets (Tachibana, 2022; Gubareva et al., 2023). These techniques allow researchers to distinguish between short-term and long-term safe-haven properties and to detect whether assets provide protection only during the most severe market downturns. Nevertheless, differences in sample periods, crisis definitions, and model specifications often lead to mixed conclusions regarding the strength and persistence of safe-haven effects for assets such as gold, sovereign bonds, Bitcoin, and safe-haven currencies (Dutta et al., 2020; Wen et al., 2022; Tronzano, 2023).

Despite this evidence, findings remain fragmented across asset classes, regions, and methods, limiting their usefulness for portfolio construction and macroprudential assessment. Broad cross-asset studies on safe-haven assets and currencies typically emphasize specific crisis indicators rather than systematically comparing their risk-mitigating impact across episodes (Tachibana, 2022; Tronzano, 2023). At the same time, focused reviews on particular instruments, such as green bonds, assess safe-haven eligibility within narrow market segments (Khamis & Aassouli, 2023). As a result, it remains difficult to compare the effectiveness of

traditional versus alternative havens in a consistent framework and to derive generalizable implications for investors, regulators, and policymakers.

This article addresses these gaps by conducting a systematic literature review of peer-reviewed studies published between 2019 and 2024 on the effect of safe-haven assets in mitigating financial risk during crisis periods. Following a transparent search, screening, and synthesis protocol, the review aggregates evidence on how gold, sovereign bonds, reserve currencies, cryptocurrencies, commodities, and sustainable instruments such as green bonds influence portfolio risk under stress. By integrating results across crises, regions, and modeling strategies, the study clarifies the conditions under which different assets function as strong, weak, or ineffective safe havens and identifies avenues for future research on crisis-resilient asset allocation and financial stability.

2. Literature Review

The existing literature on safe-haven assets reveals a nuanced and often context-dependent role of these instruments in mitigating crisis-period financial risk. Early evidence for the COVID-19 period and other recent turmoil shows that gold generally retains its reputation as a reliable safe haven for equity and oil markets, whereas Bitcoin tends to behave more like a diversifier or a weak safe haven with time-varying properties (Dutta et al., 2020; Wen et al., 2022). Comparative analyses using nonlinear models further document that, under different forms of global uncertainty, gold consistently hedges shocks more effectively than Bitcoin, which rarely qualifies as a strong safe haven (Long et al., 2021). At the same time, high-

frequency studies of the pandemic crisis highlight that even gold's safe-haven properties can be phase-specific, weakening once large-scale fiscal and monetary interventions alter the market environment (Akhtaruzzaman et al., 2021).

Beyond gold and cryptocurrencies, research has expanded to include sovereign bonds, reserve currencies, and multi-asset portfolios to understand broader flight-to-quality dynamics. Evidence points to safe-haven flows from emerging market bonds into U.S. Treasuries during episodes of heightened uncertainty, reinforcing the role of core government debt in absorbing shocks (Gubareva et al., 2023). Studies on global stock–bond interactions in the COVID-19 era reveal that bond markets can provide effective downside protection, but the strength of this protection varies across regimes and is sensitive to the nature of the shock (Papadamou et al., 2021; Tachibana, 2022). In parallel, cross-market analyses of safe-haven currencies and precious metals document heterogeneous behavior across crises and regions, suggesting that assets which act as safe havens in advanced markets may offer only partial insurance in emerging or frontier markets (Omane-Adjepong & Alagidede, 2021; Tronzano, 2023; Feder-Sempach et al., 2024).

A growing strand of work also explores non-traditional and sustainable safe-haven candidates, particularly within the context of climate concerns and responsible investing. Green bonds have been assessed for their ability to preserve value during market stress, with systematic evidence suggesting that while they can offer diversification benefits, their safe-haven status is conditional on market segment, crisis type, and the depth of the green bond market itself (Khamis & Aassouli, 2023). In cryptocurrency markets, systematic reviews and bibliometric analyses map the

fast-expanding literature on the hedging, diversification, and safe-haven properties of digital assets, underscoring that these properties are highly time-varying and sensitive to regulatory, macroeconomic, and geopolitical developments (Almeida & Gonçalves, 2022). Taken together, this body of work motivates a systematic literature review that compares how traditional and alternative safe-haven assets attenuate crisis-period financial risk across different asset classes, regions, and methodological approaches, and clarifies under what conditions these assets provide robust protection versus only weak or episodic risk mitigation.

3. Methods

This study employs a systematic literature review approach to synthesize empirical evidence on the effect of safe-haven assets in mitigating financial risk during crisis periods. The review focuses on peer-reviewed journal articles published between 2019 and 2024, reflecting the most recent episodes of financial turmoil, including the COVID-19 pandemic and subsequent waves of geopolitical and macroeconomic uncertainty. Relevant studies were identified through structured searches in major academic databases such as Scopus, ScienceDirect, and Google Scholar, using combinations of keywords including "safe haven", "flight to quality", "gold", "Bitcoin", "government bonds", "safe-haven currencies", "green bonds", "financial risk", and "crisis" or "COVID-19". The search was limited to English-language articles, and conference papers, theses, book chapters, and non peer-reviewed sources were excluded to ensure consistency in quality. Reference lists of

key papers were also screened to capture additional relevant studies that were not directly retrieved by the database searches.

A multi-stage screening protocol was applied to refine the initial pool of records. First, titles and abstracts were reviewed to exclude papers that did not examine the safe-haven, hedging, or diversification properties of assets under conditions of financial stress. Second, full-text screening focused on empirical studies that explicitly assessed the behavior of candidate safe-haven assets, such as gold, sovereign bonds, reserve currencies, cryptocurrencies, commodities, and sustainable instruments, during clearly defined crisis or high-uncertainty periods and reported quantitative measures of risk mitigation, for example correlations, hedge ratios, spillover indices, or downside risk metrics. The final set of eligible studies was coded using a structured template capturing asset type, geographical coverage, crisis episode, methodological approach, and main conclusions regarding safe-haven strength. Given the heterogeneity in assets, crises, and econometric techniques, the evidence was synthesized using a narrative and comparative approach rather than a formal meta-analysis, with the aim of identifying common patterns, divergences, and conditions under which different assets function as strong, weak, or ineffective safe havens.

4. Results and Discussion

The systematic review shows that evidence on safe-haven performance is highly conditional on asset class, crisis episode, and investment horizon. Most studies concentrate on the COVID-19 shock and related waves of turbulence, using

time-varying correlations, spillover indices, and tail-risk measures to examine how candidate safe havens behave relative to equities, oil, and other risky assets. Across this literature, safe-haven effects tend to be strongest during the most acute phases of market stress and then weaken as policy support stabilizes conditions and uncertainty subsides (Dutta et al., 2020; Akhtaruzzaman et al., 2021; Wen et al., 2022). This pattern is consistent with dynamic and regime-based models that show assets switching roles between diversifier, hedge, and safe haven across different volatility regimes and crisis windows (Tachibana, 2022; Feder-Sempach et al., 2024).

For traditional safe-haven assets, the review finds relatively robust support for gold and high-quality government bonds, although there are important cross-market differences. Gold generally appears as an effective hedge or safe haven for global equity markets and, in some cases, for oil, especially at the height of the COVID-19 crisis (Dutta et al., 2020; Akhtaruzzaman et al., 2021; Wen et al., 2022). However, its protective power is not uniform across countries and can weaken outside extreme downside episodes or in less liquid markets. Government bonds, particularly those issued by advanced economies, also retain their status as core safe havens, with yields typically falling when equity markets sell off, indicating flight to quality and flight to safety behavior (Papadamou et al., 2021; Zhou & Meng, 2023). Studies focusing on cross-border transmission further show that emerging market bonds tend to transmit volatility to global markets, while United States Treasuries and other benchmark sovereigns function more as volatility receivers, underlining the importance of credit quality and market depth for fixed-income safe havens (Umar et al., 2021; Gubareva et al., 2023).

The evidence on nontraditional safe-haven candidates is more mixed. Cryptocurrencies, and Bitcoin in particular, rarely emerge as consistently strong safe havens. Instead, they tend to behave as speculative, high beta assets that sometimes offer weak safe-haven or diversification benefits over short horizons or in specific markets, but often move in tandem with equities during severe turmoil (Dutta et al., 2020; Wen et al., 2022; Almeida & Gonçalves, 2022). Comparative studies that analyze gold, Bitcoin, and major currencies together usually conclude that Bitcoin fails to replicate the stable safe-haven behavior of gold or safe-haven currencies such as the Japanese yen or Swiss franc (Long et al., 2021; Feder-Sempach et al., 2024). At the same time, safe-haven currencies and some commodity assets show crisis-dependent behavior, with protection being stronger in advanced markets and for portfolios heavily exposed to United States and European equity indices (Omane-Adjepong & Alagidede, 2021; Tronzano, 2023).

A notable recent development is the growing attention to sustainable and ethical assets as potential crisis-period hedges. Green bonds have been examined for their ability to protect investors against equity, commodity, and foreign exchange risk, particularly during COVID-19 and climate-related episodes. The findings suggest that green bonds can act as hedges and sometimes as safe havens, but their performance depends on the depth of the market, the construction of indices, and the nature of the shock (Arif et al., 2022; Khamis & Aassouli, 2023). Complementary work on ethical and environmental, social, and governance indices indicates that several ethical asset classes display resilience to geopolitical risk, economic policy uncertainty, and volatility shocks, with green bond and clean energy indices often

among the most robust during recent crises (Hasan et al., 2024). Overall, the results imply that traditional safe havens such as gold and high-grade sovereign bonds remain central to crisis risk management, while sustainable and alternative assets can play a complementary role. However, the mixed evidence for cryptocurrencies and the conditional nature of sustainable asset performance highlight the need for careful, asset-specific analysis when designing crisis-resilient portfolios and regulatory stress scenarios.

5. Conclusion

The review concludes that the effect of safe-haven assets on mitigating crisis-period financial risk is highly context dependent rather than universal. Traditional assets such as gold and high-grade sovereign bonds generally retain their core role as hedges and safe havens, especially during the sharpest phases of turmoil, but their protective power varies across regions, asset markets, and crisis definitions. Nontraditional instruments, particularly cryptocurrencies, tend to behave more like speculative, high beta assets that at best offer weak or episodic safe-haven benefits. At the same time, reserve currencies and some commodities can provide meaningful protection in specific portfolios, although their performance is sensitive to the nature and geography of the shock.

A second key conclusion concerns the growing but still evolving role of sustainable and ethical assets. Green bonds and selected ethical or environmental, social, and governance indices show encouraging resilience to certain types of uncertainty, including pandemic-related and policy-driven shocks. However, the

evidence suggests that these instruments complement rather than replace traditional havens, and that their safe-haven properties depend on market depth, index construction, and the underlying driver of stress. Overall, safe-haven behavior appears to shift across regimes, with individual assets moving between diversifier, hedge, and safe-haven roles over time.

For investors and policymakers, these findings imply that crisis-resilient portfolio design cannot rely on static labels or a single safe-haven asset. Instead, risk management and macroprudential frameworks should account for the conditional and time-varying nature of safe-haven performance, as well as for differences between advanced and emerging markets. The study is limited by its focus on English-language, post-2019 evidence and by the use of narrative rather than meta-analytic synthesis, which points to avenues for future research. Subsequent work could extend the analysis to longer historical horizons, incorporate more systematic cross-crisis comparisons, and deepen the evaluation of climate-related and geopolitical shocks in shaping the demand for both traditional and sustainable safe-haven assets.

References

Akhtaruzzaman, M., Boubaker, S., Lucey, B. M., & Sensoy, A. (2021). Is gold a hedge or a safe-haven asset in the COVID–19 crisis?. *Economic Modelling, 102*, 105588.

Almeida, J., & Gonçalves, T. C. (2022). Portfolio diversification, hedge and safe-haven properties in cryptocurrency investments and financial economics: A systematic literature review. *Journal of Risk and Financial Management, 16*(1), 3.

Arif, M., Naeem, M. A., Farid, S., Nepal, R., & Jamasb, T. (2022). Diversifier or more? Hedge and safe haven properties of green bonds during COVID-19. *Energy Policy, 168*, 113102.

Dutta, A., Das, D., Jana, R. K., & Vo, X. V. (2020). COVID-19 and oil market crash: Revisiting the safe haven property of gold and Bitcoin. *Resources Policy, 69*, 101816.

Feder-Sempach, E., Szczepocki, P., & Bogołębska, J. (2024). Global uncertainty and potential shelters: gold, bitcoin, and currencies as weak and strong safe havens for main world stock markets. *Financial Innovation, 10*(1), 67.

Gubareva, M., Umar, Z., Teplova, T., & Vo, X. V. (2023). Flights-to-quality from EM Bonds to safe-haven US Treasury Securities: A time-frequency Analysis. *Emerging Markets Finance and Trade, 59*(2), 338-362.

Hasan, M. B., Hassan, M. K., Rashid, M., Akter, T., & Rafia, H. T. (2024). The resilience of ethical assets against different uncertainty shocks. *Heliyon, 10*(24).

Khamis, M., & Aassouli, D. (2023). The eligibility of green bonds as safe haven assets: A systematic review. *Sustainability, 15*(8), 6841.

Long, S., Pei, H., Tian, H., & Lang, K. (2021). Can both Bitcoin and gold serve as safe-haven assets? A comparative analysis based on the NARDL model. *International Review of Financial Analysis, 78*, 101914.

Omane-Adjepong, M., & Alagidede, I. P. (2021). Exploration of safe havens for Africa's stock markets: a test case under COVID-19 crisis. *Finance Research Letters, 38*, 101877.

Papadamou, S., Fassas, A. P., Kenourgios, D., & Dimitriou, D. (2021). Flight-to-quality between global stock and bond markets in the COVID era. *Finance Research Letters, 38*, 101852.

Tachibana, M. (2022). Safe haven assets for international stock markets: A regime-switching factor copula approach. *Research in International Business and Finance, 60*, 101591.

Tronzano, M. (2023). Safe-Haven currencies as defensive assets in global stocks portfolios: A reassessment of the empirical evidence (1999–2022). *Journal of Risk and Financial Management, 16*(5), 273.

Umar, Z., Manel, Y., Riaz, Y., & Gubareva, M. (2021). Return and volatility transmission between emerging markets and US debt throughout the pandemic crisis. *Pacific-Basin Finance Journal, 67*, 101563.

Wen, F., Tong, X., & Ren, X. (2022). Gold or Bitcoin, which is the safe haven during the COVID-19 pandemic?. *International Review of Financial Analysis, 81*, 102121.

Zhou, S., & Meng, X. (2023). Are government bonds still safe havens in the context of COVID-19?. *Applied Economics Letters, 30*(1), 14-18.