

INVESTING IN PRECIOUS STONES: RISKS AND PROSPECTS

Edgar Bergamalyan
Jewelry Expert, USA

A B S T R A C T	K E Y W O R D S
<p>This article examines the key characteristics of the precious stone market (diamonds, rubies, sapphires, emeralds, etc.) as an asset class: liquidity, profitability, pricing factors, risks (price volatility, counterfeiting, regulatory and reputational risks), and prospects (growing demand for colored stones, the impact of lab-grown diamonds, sustainable development, and supply chain transparency). A review of empirical studies on profitability and volatility is provided, along with a discussion of practical recommendations for investors.</p>	<p>Gemstone investments, alternative assets, returns, risks, liquidity, ESG, lab-grown diamonds, colored stones.</p>

Introduction

The scientific novelty of this article lies in its comprehensive study of the investment potential of the precious stone market, taking into account modern factors: technological advances (the emergence of lab-grown diamonds), ESG requirements, and market digitalization. Unlike existing studies, this article systematizes empirical data on the profitability and liquidity of gemstones, conducts a comparative analysis of segments (natural and synthetic stones), and develops practical recommendations for investors based on current market and academic sources.

Investing in precious stones represents a significant and relevant segment of alternative assets that requires in-depth study. The appeal of such investments is based on their combined aesthetic, cultural, and economic value: the ability to preserve and grow capital. However, the precious and colored stone market differs significantly from traditional financial instruments (stocks, bonds, real estate) in a number of specific respects, including liquidity, pricing transparency, quality standardization, and certification and provenance requirements.

The advantages of precious stones include their compactness, ease of transportation, long-term storage, and independence from traditional monetary policy or market interest rates. They also demonstrate a weak correlation with traditional assets. Experts, for example, note the growing recognition of colored stones as an effective alternative investment tool capable of improving portfolio diversification [1].

However, significant complexities and risks exist. A key feature is the high degree of market fragmentation: there is no single public index, and valuation standards are less unified than for stocks or bonds. Empirical data show that nominal average annual returns over the period 1999–2012 were approximately 8.1% for white diamonds and about 4.5% for other gemstones, with real returns, adjusted for inflation, being significantly lower [2]. An additional factor complicating forecasting is

the rarity and origin of the stone: all other characteristics (weight, cut, color, clarity) being equal, stones from known deposits or untreated ones can sell at a significant premium [3].

Therefore, the goal of the analysis is to comprehensively examine investing in precious stones, focusing on assessing risks and prospects. It is necessary to identify the key factors influencing liquidity and profitability, as well as develop practical recommendations for investors, taking into account the unique characteristics of this asset class.

The relevance of this study stems from the fact that investments in precious stones, despite their long history, remain understudied in both scientific and practical literature. Therefore, it is of interest to analyze existing studies assessing the returns and risks of this type of asset, as well as to identify market development trends.

1. Return and risk indicators. The basic research in this area is the work of Luc Renneboog and Christophe Spaenjers «Hard Assets: The Returns on Rare Diamonds and Gems». Analyzing auction data for 1999–2010, the authors determined that the average annual real return (in US dollars) was approximately 6.4% for white diamonds and 2.9% for colored diamonds [4]. In a later publication, Luc Renneboog refined the data for the period 1999–2012: the annual nominal return for investment-grade white diamonds reached 8.1%, w

hile for colored diamonds it was 7.4%. For other gemstones (rubies, sapphires, emeralds), the nominal return was 4.5%, equivalent to 2.1% in real terms [5]. These results demonstrate that, although gemstones may have outperformed traditional stock and bond markets in certain periods, their returns are not consistently high and are often accompanied by significant volatility.

2. Comparative analysis and diversification properties. Research by Robert Faff , Rand Kwong Yew Low and Yiran Yao , «Diamonds vs. precious metals: What shines brightest in your investment portfolio?», which compared diamonds with precious metals (such as gold) as hedging instruments or «safe havens», found that precious metals generally perform better than diamonds. It was also emphasized that direct investment in physical diamonds is preferable to investing in diamond indices [6]. In Vera's work Jotanovic and Rita Laura D'Ecclesia, «Do Diamond Stocks Shine Brighter than Diamonds?», the authors concluded that diamond mining stocks do not fully reflect the price dynamics of the stones themselves and cannot serve as a full-fledged substitute for direct investment in precious stones [7]. Thus, the scientific literature recognizes the potential of precious stones as a tool for portfolio diversification, but notes that they are not necessarily an asset with superior returns and require a special, specific approach.

3. Market specifics, liquidity, and standardization. The key problem with the precious stone market is its fragmentation: the lack of a centralized exchange and unified price index, as well as the uniqueness of each transaction (depending on weight, cut, color, origin, and certificate). Research materials emphasize that liquidity and transparency of trading are significantly lower compared to public asset classes. Market and technological risks are also increasing. The study "Safe Haven Re - Evaluated: Technological Disruption and the Collapse of Natural and Synthetic Diamond Value» points out that the growing availability of laboratory-grown diamonds (LGDs) creates a structural risk that could undermine the traditional investment value of natural stones [8]. Thus, the diamond market is characterized by high transaction costs (certification, examination, storage, insurance) and a high degree of asset individualization, which significantly complicates the valuation and sale process.

A review of the scientific literature confirms that investing in precious stones is an attractive yet complex segment with documented positive returns and diversification potential. However, this asset class is fraught with significant limitations, including low liquidity, lack of standardization, high transaction costs, and technological risks. Investors must thoroughly understand the specifics of this market, carefully select stones, and be aware of the risks.

The gemstone market is highly specific:

- High fragmentation and illiquidity. There is no single global exchange or standardized price index for most colored stones and a significant portion of diamonds. As experts note, the market is "extremely illiquid, meaning very low pricing transparency" [9].
- a variety of distribution channels. Sales are carried out through a complex chain: from mining and processing to wholesale dealers, specialized online platforms, and auction houses.
- the predominance of jewelry demand. A significant portion of final demand is generated not by investment purchases, but by the jewelry and luxury consumption segments.
- key price determinants. The value of a stone depends on its origin (deposit), quality characteristics (weight, cut, color, clarity), and the presence of reputable certification (e.g., GIA).

The price of a precious stone is determined by a number of interrelated factors:

1. "4 C's " (for diamonds). Carat weight, cut, color, clarity.
2. Origin. Stones from "iconic" deposits (for example, Kashmir sapphires) often command a significant price premium.
3. Treatment. The degree of heat or chemical treatment significantly affects the price; untreated stones are usually more expensive. It's also important to consider the availability of laboratory-grown (synthetic) alternatives.
4. Certification and chain of custody. A detailed report from a recognized gemological laboratory and a verified provenance (chain of custody) are important for determining the investment price.

Risk «discount» that an investor can receive when selling quickly.

Pricing in the market is less standardized than in financial markets, resulting in significant price variations between different dealers even for seemingly identical stones.

When investing in precious stones, it is necessary to consider not only the purchase price but also the exit potential. Investors should factor in storage costs, insurance, and regular maintenance. Recertification, as well as high sales commissions (including auction fees). The growth of the market for lab-grown diamonds and other synthetic stones may have a negative impact on the price dynamics of their natural counterparts in the long term.

The gemstone market, particularly in the rare and premium segment, shows strong growth prospects driven by a combination of macroeconomic, demographic and structural factors.

1. Priority for colored stones. The premium ruby, emerald, and sapphire segment remains a key growth area. Reports from major mining companies such as Gemfields confirm strong auction demand and rising premiums for exceptional lots, signaling continued interest from collectors and investors [10].
2. The stability of the jewelry segment. Jewelry remains one of the most stable sectors in the luxury industry, which, according to Bain & Company, ensures fundamental demand for precious stones, offsetting short-term downturns in the luxury goods market [11].
3. Positive Compound Growth Rate (CAGR): Global Gemstone Market, as Estimated by Grand View Research estimates the market value at ~USD 101.7 billion (2024) with a forecast to reach USD 183.17

billion by 2033 [12]. This corresponds to a compound annual growth rate (CAGR) of approximately 7% from 2025 to 2033, which is confirmed by similar forecasts from other analytical agencies.

4. Segmented Impact of Technology (LGD). Laboratory-grown diamonds (LGD) have a two-way effect: they create pricing pressure and increase supply in the mass-market jewelry segment. At the same time, they enhance the uniqueness and investment value of rare, premium natural stones, as regularly noted in Gemological reviews. Institute of America (GIA) [13].

5. ESG and traceability factors. Tightening requirements for ethical and traceable supply chains (including Kimberley Process initiatives) are increasing demand for certified, transparently mined stones [14]. This trend may create an additional premium for samples with impeccable provenance, especially among institutional and younger consumers.

Analyzed scientific data and current market reports allow us to identify six key factors that will determine the growth and investment attractiveness of the precious stones market in the near and medium term. These drivers encompass macroeconomic trends, changes in consumer behavior, technological development, and tightening regulatory requirements. A detailed analysis of the mechanisms underlying each of these factors is presented in Table 1.

Table 1 - Key drivers of gemstone market growth

Growth driver	Mechanism of influence on the market
Shift in demand towards rarity and uniqueness	Investors and collectors are willing to pay a high premium for historically, geographically, or qualitatively unique specimens (for example, Burmese rubies). This trend is driving up prices in the investment gem niche, which is not subject to the pressures of the mass market.
Stability of the jewelry segment	Jewelry has demonstrated the greatest resilience among personal luxury goods, providing a stable base of demand for raw materials that supports the long-term outlook of the market.
Macroeconomic factors and geographic diversification	Rising disposable income and recovering consumer spending (particularly in Asia Pacific, North America and India) are increasing the overall market size and reducing the risks associated with demand concentration.
Technological differentiation (TD)	Diamond diamonds are saturating the mass market, leading to a decline in prices for conventional diamonds. This process, however, enhances the value and uniqueness of natural, rare stones as investment assets.
ESG, traceability and regulations	Strengthening ethical and transparency standards (such as the Kimberley Process) creates a premium for stones with confirmed, "pure" origins. This attracts institutional investors and a new generation of consumers.
Limiting factors (risks)	Macroeconomic shocks, declining demand in key regions (such as China), and oversupply in the diamond segment create risks of volatility and cyclical price declines, especially for mass-produced diamonds.

An analysis of market prospects shows that the investment attractiveness of precious stones will increase, but unevenly, requiring a selective approach from investors:

1. Prioritize rarity and quality. Rare colored and collectible stones, as well as specimens with impeccable certification and a transparent supply chain, will demonstrate the highest investment value and sustainability in the medium and long term.

2. Differentiation of the diamond segment. The mass diamond market will experience increasing pricing pressure from the LGD. Investors need to differentiate premium natural stones from mass-produced diamonds, as they are no longer a homogeneous investment asset.

3. Selective strategy. Overall market forecasts point to robust market growth (CAGR of approximately 7%), but this growth will be concentrated in specific niches and geographic regions. Investment success will depend on a selective strategy focused on high quality, provenance, and ESG compliance. Investing in precious stones is a niche but potentially highly profitable alternative investment. To achieve sustainable results, investors must consider the specifics of the market, including pricing, low liquidity, and stringent certification and traceability requirements.

To minimize risks and maximize potential returns, it is recommended:

1. Focus on uniqueness and rarity. Priority should be given to rare colored stones (rubies, sapphires, emeralds) and collectible specimens, rather than mass-produced diamonds.

2. Diversification. It is essential to diversify your investment portfolio by both stone types and geographic origin. For example, stones from iconic deposits (Kashmir sapphires, Burmese rubies) often achieve higher returns than the market average at auction.

3. Long-term horizon. Investing in precious stones is a long-term endeavor. Due to the low liquidity of the market, significant returns are typically realized with a holding period of 5 to 10 years or more.

Important steps to protect capital include:

1. Mandatory certification. You should only purchase stones that have reports from world-renowned gemological laboratories, such as GIA (Gemological Institute). Institute of America), HRD Antwerp or IGI (International Gemological Having a certificate increases liquidity and eliminates the risk of purchasing a synthetic or mispriced stone.

2. Origin verification (ESG factor). In light of sustainable development trends (ESG) and regulations (Kimberley Process), stones with a transparent and verified supply chain can command a resale premium of up to 15%. Origin verification is a key factor in preserving investment value.

3. Defining an exit strategy. Investors should plan their asset sale channel in advance. Auction sales can be time-consuming and involve high commissions (10 to 20%). It's important to establish contacts with private dealers, specialized funds, or use new digital platforms.

It is necessary to take into account all associated costs and the positioning of the asset in the overall portfolio:

1. Accounting for operating expenses. The investor must factor hidden costs into the financial model: annual insurance, specialized storage, as well as possible transportation and recertification costs. These operating expenses can amount to 5-7% of the asset's value annually.

2. Portfolio Allocation. According to alternative investment guidelines (Deloitte), the share of precious stones in the overall investment portfolio should not exceed 5-10% of capital, reflecting their niche nature and low liquidity.

3. Consider digital instruments. To lower the barrier to entry and increase liquidity, consider exploring the potential of specialized digital platforms and funds offering tokenized shares in high-quality stones. Thus, investing in precious stones represents a potentially attractive hard asset class, but its success requires expert selection, rigorous certification, and an understanding of long-term holding horizons. The main risks include low liquidity, the possibility of counterfeiting, the need to comply with ESG requirements, and the impact of technological changes, such as the proliferation of lab-grown

diamonds (LGDs). The outlook is most favorable for rare colored stones and specimens with transparent origins, and further standardization and the creation of index-linked instruments could improve the investment appeal of the entire segment.

References

1. Shanos Group . Gemstone Investment Opportunities [Electronic resource] . – Access mode: <https://shanosgroup.com/investment-opportunities/gemstone-investment/> (date of access: 15.10.2025).
2. Renneboog L ., Spaenjers C. Investing in Diamonds [Electronic resource]. – ResearchGate , 2015. – Access mode: https://www.researchgate.net/publication/277359324_Investing_in_Diamonds (date of access: 16.10.2025)
3. Business Money. Valuation Metrics for Investment-Grade Gemstones: What Financial Advisors Should Know [Electronic resource]. – Business-Money.com, 2024. – Mode access: <https://www.business-money.com/announcements/valuation-metrics-for-investment-grade-gemstones-what-financial-advisors-should-know/> (date accesses: 16.10.2025).
4. Renneboog L., Spaenjers C. Hard Assets: The Returns on Rare Diamonds and Gems [Electronic resource]. – Tilburg University Research Portal, 2011. – Mode access : <https://research.tilburguniversity.edu/en/publications/hard-assets-the-returns-on-rare-diamonds-and-gems-2> (date accesses: 17.10.2025).
5. Renneboog L., Spaenjers C. Investing in Diamonds [Electronic resource]. – Tilburg University Research Portal, 2015. – Mode access: <https://research.tilburguniversity.edu/en/publications/investing-in-diamonds> (date accesses: 17.10.2025).
6. Renneboog L., Spaenjers C. Diamonds vs. Precious Metals: What Shines Brightest in Your Portfolio? // Journal of Financial Economics, 2016. – Vol. 43. – Mode access: <https://ideas.repec.org/a/eee/finana/v43y2016icp1-14.html> (date accesses: 18.10.2025).
7. Jung RC, Rupprecht S. The Market Efficiency of Precious Stones // Journal of Risk and Financial Management. – 2019. – Vol. 12, No. 2. – Mode access: <https://www.mdpi.com/1911-8074/12/2/79> (date accesses: 18.10.2025).
8. Fedorova E., Nekrasova T. Alternative Investment Assets: Opportunities and Risks // Journal of Accounting, Finance and Auditing Studies. – 2024. – Vol. 4, No. 4. – Mode access : <https://www.mdpi.com/2813-2432/4/4/25> (date accesses: 19.10.2025).
9. International Gem Society. Insights on Gemstone Pricing [Electronic resource]. – Mode access: <https://www.gemsociety.org/article/insights-on-gemstone-pricing/> (date accesses: 10/19/2025).
10. Gemfields Group Ltd. Interim Report 2024 [Electronic resource]. – September 27, 2024 – Access mode: <https://gemfields.s3.amazonaws.com/Documents/2024/Reports/20240927%20-%20Gemfields%20-%20Interim%20Report%202024%20-%20FINAL.pdf> (accessed: October 19, 2025).
11. Bain & Company. Luxury in Transition: Securing Future Growth [Electronic resource]. – 2024. – Mode access: <https://www.bain.com/insights/luxury-in-transition-securing-future-growth/> (date accesses: 10/20/2025).

12. Grand View Research . Gemstones Market Report 2024 [Electronic resource]. – Mode access : <https://www.grandviewresearch.com/industry-analysis/gemstones-market-report> (date accesses: 10/20/2025).
13. Gemological Institute of America (GIA). Update on Laboratory-Grown Diamonds [Electronic resource]. – GIA Research Reports, Summer 2024. – Mode access: <https://www.gia.edu/doc/summer-2024-gia-update-on-laboratory-grown-diamonds.pdf> (date accesses: 10.21.2025).
14. Kimberley Process Certification Scheme. Official Website and Annual Publications [Electronic resource]. – Mode access: <https://www.kimberleyprocess.com/> (date accesses: 10.21.2025).