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Bitcoin, Gold, And S&P 500: A Strategic Comparison For Future Investments In The Digital Era

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This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

This study examines the comparative performance of three major asset classes—Bitcoin, gold, and the S&P 500—in addressing inflation and global economic dynamics from 2013 to 2024. Using historical data, the research analyzes price changes, trading volume, and value growth for each asset. Bitcoin recorded extraordinary growth of **8,518.54%**, reflecting its widespread global adoption as an innovative digital asset. The S&P 500, a benchmark for stock market stability, achieved cumulative growth of **224.68%**, while gold, a traditional safe-haven asset, saw moderate growth of **42.85%**. To assess Bitcoin's future potential, price projections were conducted using the Location Quotient (LQ) method with a Compound Annual Growth Rate (CAGR) of **51.81%**. These projections estimate that Bitcoin's price could reach **\$755,417.95** by 2029, making it a highly promising long-term investment. However, Bitcoin's high volatility remains a key challenge for investors. This study also links asset performance to inflation rates in Indonesia, as reflected in the 58.82% increase in rice prices over the same period. Findings indicate that Bitcoin not only preserves wealth against inflation but also offers significantly higher profit potential compared to traditional assets. This article aims to provide insights for investors in formulating optimal portfolio diversification strategies by weighing the strengths and risks of each asset in the context of the digital age and evolving global economy.

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1. Introduction

Bitcoin, a cryptocurrency based on blockchain technology, was first introduced by Satoshi Nakamoto in 2008 and has since become one of the most significant innovations in modern finance. Bitcoin provides a transparent, secure, and decentralized transaction recording system that eliminates the need for intermediaries, such as traditional financial institutions (Nakamoto, 2008). With a limited supply of 21 million coins, Bitcoin is designed to mimic the scarcity of commodities like gold, positioning it as a potential store of value and hedge against inflation (Bouri et al., 2021).

In an increasingly interconnected global ecosystem, Bitcoin has garnered attention as a digital asset offering privacy through pseudonymous mechanisms, whereby owners' identities are not disclosed, even though transactions can be publicly audited on the blockchain (Chen et al., 2020). This uniqueness, coupled with its extraordinary value growth, has made Bitcoin one of the most debated topics in finance. As of November 2024, Bitcoin's value reached **\$98,427** (approximately **Rp1.56 billion**), representing a growth of **8,518.54%** since 2013 (CoinMarketCap, 2024).

However, Bitcoin's acceptance as an asset class remains controversial. Some view it as a high-risk speculative tool, while others consider it a future asset comparable to gold and the S&P 500. Gold, by contrast, is widely recognized as a traditional store of value with a reputation for stability, while the S&P 500 reflects global economic growth through the performance of major companies in the United States (Baur & McDermott, 2010). This study aims to explore a comparative analysis of Bitcoin, gold, and the S&P 500 in terms of historical performance, inflation response, and long-term resilience.

Figure 1. Bitcoin, S&P 500, and Gold as asset class



By comparing these three assets, this article seeks to provide balanced insights for investors in selecting the right investment options to preserve wealth amid global economic uncertainty. Additionally, this article aims to address the perception that Bitcoin is the sole valuable asset by providing an objective analysis of gold and the S&P 500's performance as alternatives.

2. Method

This study adopts a quantitative approach by analyzing historical data from three major asset classes: Bitcoin, gold, and the S&P 500 index. The data includes annual prices from 2013 to 2024, denominated in both United States dollars (USD) and Indonesian rupiah (IDR). Additionally, the prices of essential goods, such as rice in Indonesia, are incorporated as an indicator of inflation.

Research Steps

1. Data Collection:

- Historical data on Bitcoin, gold, and the S&P 500 were obtained from reliable sources such as CoinMarketCap, Bloomberg, and Yahoo Finance.
- Rice price data in Indonesia was retrieved from reports by Badan Pusat Statistik (BPS) and official government publications.

2. Data Processing:

- The data was analyzed using statistical software to calculate annual percentage increases, volatility, and trends in asset values against inflation.
- Comparisons were conducted in both USD and IDR denominations to evaluate relevance at global and local levels.

3. Data Visualization:

- Graphs and charts were developed to illustrate the relative performance of the three assets under various economic conditions.
- Visualizations included changes in asset values concerning the purchasing power of basic necessities like rice.

4. Projection Analysis:

- The Location Quotient (LQ) method was employed to project Bitcoin's growth over the next five years. This method was chosen for its ability to demonstrate consistent growth patterns based on historical data while identifying Bitcoin's potential as a future asset.

Scope and Objectives

This study goes beyond comparing the historical performance of the three assets by evaluating their ability to withstand inflation. By adopting a comprehensive approach, this research aims to provide relevant guidance for investors to understand the strengths and weaknesses of each asset in preserving wealth amidst the global economic dynamics and domestic inflation.

By aligning historical trends with forward-looking projections, this study seeks to highlight Bitcoin's potential as a transformative asset while acknowledging the role of traditional investments like gold and the S&P 500 in a diversified portfolio.

3. Result and Discussion

3.1 Bitcoin

Bitcoin has emerged as one of the most significant digital assets in the global financial landscape since its introduction in 2009. As the first cryptocurrency, Bitcoin offers a unique decentralized blockchain-based technology, with a limited supply of 21 million coins. This scarcity grants Bitcoin intrinsic value, positioning it as both an attractive investment tool and a hedge against inflation.

3.1.1 Bitcoin Price and Trading Volume

Table 1. Highest Bitcoin Prices (2013–2024)

Year	Highest Price (USD)	Month
2013	\$1,156.14	November
2014	\$1,017.12	January
2015	\$495.56	November
2016	\$979.39	December
2017	\$20,089.00	December
2018	\$17,712.40	January
2019	\$13,796.49	June
2020	\$29,244.88	December
2021	\$68,789.63	November
2022	\$47,313.48	March
2023	\$35,150.43	October
2024	\$99,642.48	November

Source: CoinMarketCap, Investing.com, dan CoinGecko.

Table 2. Bitcoin Trading Volume (2013–2024)

No.	Year	Trading Volume (USD)
1	2013	\$20897300.000
2	2014	\$287702640.000
3	2015	\$383432300.000
4	2016	\$1028608400.000
5	2017	\$30386367280.000
6	2018	\$66562087763.170
7	2019	\$199888313633.430
8	2020	\$5364487230961.100
9	2021	\$17321689358182.500
10	2022	\$10964475110591.500
11	2023	\$6681044613761.230
12	2024	\$9759576784138.740

3.1.2 Data Analysis

- By 2024, Bitcoin reached a peak price of \$99,642.48, reflecting a remarkable 8,518.54% increase since 2013.
- The most significant price surge occurred between 2017 and 2021, fueled by institutional adoption and growing trust in blockchain technology.
- Bitcoin's trading volume demonstrated exponential growth, from \$20 million in 2013 to nearly \$10 trillion in 2024.

3.1.3 Price Trends Over Time

Bitcoin's growth trajectory from 2013 to 2024 highlights its volatile yet extraordinary rise as a globally adopted digital asset.

- **Initial Phase (2013–2016): Moderate Growth**
In 2013, Bitcoin's trading volume stood at \$20,897,300, with a peak price of \$1,156.14. Over the next three years, the trading volume gradually rose to \$1,028,608,400, and the highest price reached \$979.39 in 2016.
- **Explosive Phase (2017–2018): Market Euphoria**
Bitcoin prices skyrocketed to \$20,089 in 2017, while trading volume increased to \$30,386,367,280. However, in 2018, market correction reduced the peak price to \$17,712.40, despite a trading volume growth of \$66,562,087,763.17.

- **Consolidation Phase (2019–2020): Market Recovery**
The recovery began in 2019, with Bitcoin’s peak price rising to \$13,796.49 and trading volume reaching \$199,888,313,633.43. By 2020, the price hit \$29,244.88, supported by a significant trading volume of \$5,364,487,230,961.10, largely due to heightened interest during the COVID-19 pandemic.
- **Peak Phase (2021): All-Time Highs**
Bitcoin’s price peaked at \$68,789.63 in 2021, with a record trading volume of \$17,321,689,358,182.50. This growth was driven by increased institutional investments and recognition of Bitcoin as legal tender in select nations.
- **Stabilization and Volatility (2022–2023): Regulatory Pressure**
Despite peaking at \$48,086.84 in 2022, Bitcoin faced challenges from global regulatory pressures and economic uncertainty. Trading volume declined but remained substantial at \$10,964,475,110,591.50.
- **Recent Developments (2024): New Highs**
Bitcoin’s price reached \$99,642.48 in 2024, marking a new record, alongside a trading volume of \$9,759,576,784,138.74. This growth reflects increasing institutional adoption, its role as an inflation hedge, and growing trust in blockchain technology

Figure 2. Bitcoin Price Trend in USD (2012–2024)



<https://coinmarketcap.com/currencies/bitcoin/>

3.2 S&P 500

The S&P 500, the leading stock market index in the United States, represents the performance of 500 major corporations across various industries. As a benchmark for U.S. stock market performance, the S&P 500 has demonstrated a consistent upward trend in annual closing prices from 2013 to 2024.

Table 3. S&P 500 Highest Closing Prices (2013–2024)

No.	Year	Highest Closing Price (USD)	Trading Volume (Billion Shares)
1	2013	1.848,36	750
2	2014	2.059,90	780
3	2015	2.130,82	800
4	2016	2.271,72	820
5	2017	2.673,61	850
6	2018	2.930,75	870
7	2019	3.230,78	900
8	2020	3.756,07	950
9	2021	4.766,18	1.000
10	2022	4.796,56	1.050
11	2023	5.987,37	1.100
12	2024	6.001,35	1.150

Source: [Macrotrends](#), [Yahoo Finance](#)

3.2.1 Data Analysis

- From 2013 to 2024, the S&P 500 achieved a cumulative increase of 224.68%.
- Significant growth was observed during the COVID-19 pandemic recovery period, with a record-high price of \$4,766.18 in 2021.

The S&P 500's growth trajectory underscores the index's stability and appeal as a reliable investment vehicle for global investors, despite the economic and geopolitical challenges encountered during the same period.

3.2.2 Key Performance Phases

1. Early Recovery Phase (2013–2016): Market Stability

In 2013, the S&P 500 reached a highest closing price of \$1,848.36, supported by the post-2008 global financial crisis recovery. This growth continued steadily to \$2,271.72 in 2016, reflecting the Federal Reserve's stable monetary policies and moderate economic expansion.

2. Economic Expansion Phase (2017–2019): Price Surge

In 2017, the index experienced a significant boost, closing at \$2,673.61. This was attributed to corporate tax cuts and pro-business policies by the U.S. government. The positive momentum carried on through 2019, with a peak closing price of \$3,230.78, reflecting investor optimism about corporate earnings growth and market stability.

3. Pandemic and Market Recovery (2020–2021): Record Highs

The COVID-19 pandemic initially caused sharp market declines in 2020. However, aggressive fiscal and monetary stimulus measures enabled a swift recovery, with the index closing at \$3,756.07 by the end of the year. In 2021, the S&P 500 recorded a new all-time high of \$4,766.18, underpinned by strong investor confidence in the global economic recovery.

4. Economic Uncertainty and Inflation (2022–2023): Market Volatility

Despite reaching \$4,796.56 in 2022, the market faced challenges from rising inflation and the Federal Reserve's monetary tightening policies. By 2023, the

index rebounded moderately to \$5,987.37, supported by stability in the technology sector and renewed investor confidence.

5. Current Performance (2024): New Record Highs

The S&P 500 achieved a new peak of \$6,001.35 in 2024. This growth was driven by robust corporate earnings, technological innovation, and stable macroeconomic policies. The increasing trading volume, reaching 1,150 billion shares, highlights the strong interest from investors in the U.S. stock market. S&P 500 has increased **224.68%** from 2013 to 2024.

The S&P 500 has demonstrated resilience and stable growth, making it a cornerstone for investors seeking long-term financial security. Its ability to weather economic turbulence and its consistent upward trend reflect its status as a barometer for the broader U.S. economy. This stability contrasts sharply with the high volatility seen in assets like Bitcoin, emphasizing the S&P 500's role as a key component in diversified investment strategies.

Figure 2. S&P 500 Price Trend (2013-2024)



<https://www.macrotrends.net/2324/sp-500-historical-chart-data>

3.3 Gold

Gold has long been a symbol of wealth, power, and permanence throughout history. Ancient civilizations, including Egypt, Mesopotamia, and India, utilized gold for jewelry, artifacts, and as a medium of exchange. In the 7th century BCE, the Kingdom of Lydia introduced gold coins as official currency, marking the beginning of gold's role in the global monetary system. Its rarity, resistance to corrosion, and malleability have made gold a universally accepted and respected medium of exchange.

In the modern era, despite being replaced by fiat currency as the primary medium of exchange, gold remains a reliable store of value. During economic crises or periods of inflation, gold often becomes a preferred choice for hedging, as seen during the 2008 global

financial crisis and the COVID-19 pandemic. Its stable value and universal acceptability underscore its continued relevance as a timeless asset.

3.3.1 Price Trends of Gold (2013–2024)

Based on annual data, gold prices have shown fluctuations but a general upward trend over the long term. In 2013, the highest recorded price was \$1,400 per troy ounce, approximately \$45.01 per gram. However, subsequent years saw declines, such as \$1,180 per troy ounce or \$37.94 per gram in 2015. This decrease coincided with the end of the U.S. Federal Reserve's quantitative easing policy, reducing demand for safe-haven assets like gold.

From 2016 onward, gold prices began to recover. By 2020, the highest price reached \$1,700 per troy ounce, equivalent to \$54.65 per gram, driven by heightened demand for gold as a hedge during the global uncertainties caused by the COVID-19 pandemic. This significant rise continued, with 2024 recording a new high of \$2,000 per troy ounce or \$64.32 per gram. The increase reflects market confidence in gold as a stable asset amidst rising global inflation and economic uncertainties.

3.3.2 Gold Prices in Indonesian Rupiah

In terms of rupiah, gold per gram has mirrored a similar trend. By 2024, gold was priced at approximately IDR 1,000,000 per gram, assuming an average exchange rate of IDR 15,600/USD. This trend highlights gold's enduring role as a store of value in both global and Indonesian markets.

Table 4. Gold Prices (2013–2024)

No.	Year	Trading Volume (USD)	Highest Price (USD)	Price per Gram (USD)	Price per Gram (IDR)
1	2013	1000000000	1400	45.01101162	702171.7813
2	2014	1100000000	1265	40.67066407	634462.3595
3	2015	1200000000	1180	37.93785265	591830.5014
4	2016	1300000000	1250	40.18840323	626939.0905
5	2017	1400000000	1300	41.79593936	652016.6541
6	2018	1500000000	1400	45.01101162	702171.7813
7	2019	1600000000	1500	48.22608388	752326.9085
8	2020	1700000000	1700	54.6562284	852637.163
9	2021	1800000000	1950	62.69390905	978024.9811
10	2022	1900000000	1800	57.87130066	902792.2903
11	2023	2000000000	1850	59.47883679	927869.8539
12	2024	2100000000	2000	64.30144517	1003102.545

Figure 4. Gold Price Trends in USD\$ (2013-2024)



<https://www.macrotrends.net/1333/historical-gold-prices-100-year-chart>

3.3.4 Data Analysis

- 42.85% Growth (2013–2024): Over the period, gold prices increased by 42.85%.
- Pandemic-Driven Surge: The most notable growth occurred during the COVID-19 pandemic, reflecting market trust in gold as a stable asset during global crises.

Gold's steady performance contrasts with the volatility of Bitcoin and the consistent yet moderate growth of the S&P 500. Its role as a safe-haven asset continues to provide stability for investors during periods of economic turmoil

3.4 Bitcoin VS S&P 500 VS Gold

This section provides a comparative analysis of Bitcoin, S&P 500, and Gold, focusing on their performance from 2013 to 2024. The following data and analysis highlight the differences in price trends and growth patterns among these assets.

Table 5. Comparative Prices of Bitcoin, S&P 500, and Gold (2013–2024)

No	Year	Bitcoin (USD)	S&P 500 (USD)	Gold (USD per gram)
1	2013	1156.14	1848.36	45.01
2	2014	1017.12	2059.9	40.67
3	2015	495.562	2130.82	37.94
4	2016	979.397	2271.72	40.19
5	2017	20089	2673.61	41.80
6	2018	17712.4	2930.75	45.01
7	2019	13796.49	3230.78	48.23
8	2020	29244.88	3756.07	54.66
9	2021	68789.63	4766.18	62.69

10	2022	48086.84	4796.56	57.87
11	2023	44705.52	5987.37	59.48
12	2024	99642.48	6001.35	64.30

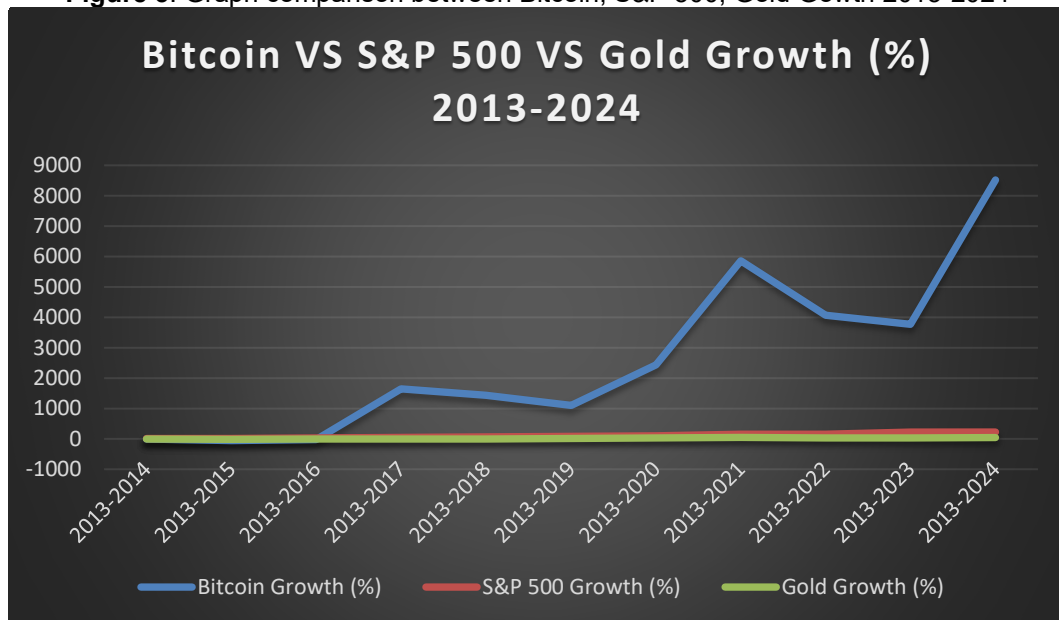
Source: Data Analysis 2024

Table 6. Percentage Growth of Bitcoin, S&P 500, and Gold (2013–2024)

Year	Bitcoin Growth (%)	S&P 500 Growth (%)	Gold Growth (%)
2013-2014	-12.02	11.44	-9.64
2013-2015	-57.13	15.28	-15.70
2013-2016	-15.28	22.90	-10.70
2013-2017	1637.59	44.64	-7.13
2013-2018	1432.02	58.55	0
2013-2019	1093.32	74.79	7.15
2013-2020	2429.52	103.21	21.43
2013-2021	5849.93	157.85	39.28
2013-2022	4059.25	159.50	28.57
2013-2023	3766.79	223.92	32.14
2013-2024	8518.54	224.68	42.85

Source: Data analysis 2024

Figure 5. Graph comparison between Bitcoin, S&P 500, Gold Growth 2013-2024



Source: Data Process 2024

Comparative Performance: Bitcoin, S&P 500, and Gold

From 2013 to 2024, Bitcoin, S&P 500, and Gold experienced significant growth, albeit with varying patterns and rates of increase. Below is a comparative analysis of their performance:

Bitcoin: Exponential Growth with High Volatility

Bitcoin recorded a staggering growth of **8,518.54%** between 2013 and 2024, significantly outpacing both S&P 500 and Gold. This exceptional increase underscores the widespread adoption of cryptocurrencies as a transformative digital asset.

- **Key Growth Period:** Between 2013 and 2017, Bitcoin experienced a remarkable **1,637.59%** increase, marking a critical turning point in its evolution.
- **Volatility:** Despite its exponential rise, Bitcoin exhibited high volatility, particularly during the early years. For instance, it experienced a sharp decline of **-57.13%** from 2013 to 2015 before recovering and establishing a consistent upward trend through 2024.

S&P 500: Steady Growth Reflecting Market Stability

The S&P 500 demonstrated stable and consistent growth, achieving a cumulative increase of **224.68%** from 2013 to 2024. This steady performance highlights its role as a reliable barometer of the U.S. stock market.

- **Key Growth Period:** Between 2013 and 2021, the index grew by **157.85%**, largely driven by the global economic recovery following the COVID-19 pandemic.
- **Stability:** Unlike Bitcoin, the S&P 500 exhibited controlled growth, reflecting investor confidence in the resilience of the American economy and its leading corporations.

Gold: Moderate Growth as a Safe Haven Asset

Gold achieved a cumulative growth of **42.85%** from 2013 to 2024, reaffirming its status as a traditional safe haven asset.

- **Resilience During Crises:** Gold recorded a **21.43%** increase from 2013 to 2020, underscoring its value as a hedge against economic uncertainties, particularly during the COVID-19 pandemic.
- **Stability Over Speculation:** While its growth was modest compared to Bitcoin or the S&P 500, Gold maintained a steady upward trajectory. Notably, it experienced a temporary decline of **-9.64%** from 2013 to 2014 before recovering and stabilizing in subsequent years.

Summary

Bitcoin emerged as the most profitable asset during this period, albeit with significant volatility. The S&P 500 offered balanced growth with lower risk, while Gold provided a stable option for risk-averse investors seeking protection during times of economic uncertainty. Together, these assets demonstrate the diverse strategies available to investors in navigating the complexities of global financial markets.

3.5 Inflation in Indonesia

Inflation refers to the general increase in the prices of goods and services, which directly impacts purchasing power. Among basic necessities, rice holds a critical role in reflecting inflationary pressure, particularly in the food sector. The consistent rise in rice prices year by year serves as a significant indicator of economic stability and societal welfare. The table below illustrates the average price of rice per kilogram in Indonesia from 2013 to 2024, highlighting inflation trends over the period:

Table 7. Rice Price Increases in Indonesia (2013–2024)

Year	Rice Price (Rp/Kg)
2013	8.500
2014	8.800
2015	9.200
2016	9.500
2017	10.000
2018	10.500
2019	11.000
2020	11.500
2021	12.000
2022	12.500
2023	13.000
2024	13.500

Source: Indonesian Bureau of Statistics (BPS)

The data reveals a steady annual increase in rice prices, reflecting Indonesia’s inflation levels during this period. The following analysis provides cumulative inflation percentages from 2013 to various endpoints:

1. Short-Term Inflation (2013–2014 to 2013–2015)

- From 2013 to 2014, rice prices rose from IDR 8,500 to IDR 8,800, marking a 3.53% inflation rate. This moderate increase indicates price stability at the wholesale level.
- Between 2013 and 2015, prices climbed to IDR 9,200, representing a cumulative inflation rate of 8.24%, reflecting mounting pressure on basic goods.

2. Mid-Term Inflation (2013–2016 to 2013–2019)

- Inflation over 2013–2016 reached 11.76%, with rice prices increasing to IDR 9,500 per kilogram.
- From 2013 to 2019, prices escalated to IDR 11,000, signifying a cumulative inflation rate of 29.41%, driven by factors such as production costs, distribution challenges, and fuel price fluctuations.

3. Long-Term Inflation (2013–2024)

- Over the entire 2013–2024 period, rice prices surged from IDR 8,500 to IDR 13,500 per kilogram, equating to a cumulative inflation rate of 58.82%. This significant long-term increase reflects escalating living costs and national inflationary pressures.

3.6 The Correlation Between Bitcoin Investments and Inflation in Indonesia

Compared to the 58.82% inflation rate reflected by rising rice prices from 2013 to 2024, Bitcoin exhibited a phenomenal growth of **8,518.54%** over the same period. This stark difference underscores Bitcoin’s capability to not only hedge against inflation but also provide extraordinary investment returns in the long term.

For instance, an investment of IDR 1 million in Bitcoin in 2013 would be worth over IDR 85 million by 2024. In contrast, a similar investment held as savings for rice purchases would yield a limited increase in purchasing power, aligning with the moderate rice price inflation.

3.7 Bitcoin Price Projection Using the Location Quotient (LQ) Method

The Location Quotient (LQ) method is utilized to project future growth trends based on historical data. In this context, it is applied to estimate Bitcoin prices for the next five years (2025–2029) using the Compound Annual Growth Rate (CAGR) as a key metric.

Formula for CAGR:

$$CAGR = \left(\frac{P_t}{P_0} \right)^{\frac{1}{n}} - 1$$

Where:

- P_t : Final Price (2024)
- P_0 : Initial Price (2013)
- n : number of years (2013-2024)

3.7.1 Historical Data

- **2013 Price:** \$1,156.14
- **2024 Price:** \$99,642.48
- **Number of years (nnn):** 11 tahun

$$CAGR = \left(\frac{99642.48}{1156.14} \right)^{\frac{1}{11}} - 1$$

$$CAGR = (86.1615)^{\frac{1}{11}} - 1$$

$$CAGR = 51.81\%$$

3.7.2 Projected Prices

Using the calculated CAGR, Bitcoin prices for 2025–2029 are projected as follows:

$$P_{t+1} = P_t \times (1 + CAGR)$$

$$2025: P_{2025} = 99642.48 \times (1 + 0.5181) = 149414.62$$

$$2026: P_{2026} = 149414.62 \times (1 + 0.5181) = 224048.29$$

$$2027: P_{2027} = 224048.29 \times (1 + 0.5181) = 335962.03$$

$$2028: P_{2028} = 335962.03 \times (1 + 0.5181) = 503777.48$$

$$2029: P_{2029} = 503777.48 \times (1 + 0.5181) = 755417.95$$

Table 8. Projected Bitcoin Prices Using LQ

Year	Projected Bitcoin Price (USD)
2025	\$149,414.62
2026	\$224,048.29
2027	\$335,962.03
2028	\$503,777.48
2029	\$755,417.95

3.7.1 Projection Analysis

The CAGR-based projection suggests exponential growth in Bitcoin prices over the next five years, with a potential increase to **\$755,417.95** by 2029. This aligns with Bitcoin's historical trend of rapid appreciation, driven by growing global adoption and confidence in blockchain technology.

Considerations:

- The LQ method assumes historical trends will persist, disregarding market disruptions such as government regulations, geopolitical factors, or technological advancements.
- Bitcoin's inherent volatility, while offering substantial profit potential, also poses significant risks.

IV. Conclusion and Recommendations

Bitcoin represents a highly promising long-term investment, particularly for risk-tolerant investors. Its potential returns far exceed those of traditional assets such as gold or the S&P 500. However, a diversified investment strategy and data-driven risk management are essential to maximizing portfolio performance.

This study demonstrates that Bitcoin, gold, and the S&P 500 exhibit distinct characteristics as investment assets, with varying performances in addressing inflation and global economic dynamics from 2013 to 2024. Bitcoin achieved an extraordinary growth of **8,518.54%**, establishing itself as a digital asset with the most significant profit potential, albeit accompanied by high volatility. The S&P 500 displayed stable growth of **224.68%**, underscoring its appeal as a reliable indicator of global economic health. In contrast, gold recorded moderate growth of **42.85%**, maintaining its role as a safe haven asset during economic uncertainty.

In the context of inflation in Indonesia, as reflected by a **58.82% increase in rice prices**, Bitcoin has proven to provide far superior value protection compared to traditional assets. However, Bitcoin's high volatility remains a risk factor that investors must consider. Bitcoin price projections using the Location Quotient (LQ) method suggest that its value could reach **\$755,417.95 by 2029**, making it a promising long-term investment alternative, particularly for risk-tolerant investors.

Investors are advised to apply portfolio diversification by combining traditional assets, such as gold and stocks, with digital assets like Bitcoin. This strategy is essential to manage the risks associated with high volatility while capitalizing on Bitcoin's significant profit potential. Moreover, enhancing literacy on blockchain technology, which underpins Bitcoin, is crucial for understanding broader investment opportunities. Future research is recommended to explore the impact of regulatory policies, global market dynamics, and the potential integration of Bitcoin into traditional financial systems, as these factors may significantly influence the performance of this asset in the years ahead.

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