

The Evolution of the Zakat Nisab in Algeria under Inflationary Pressures: An Analytical Study (2010–2025)

L'évolution du nisab de la zakat en Algérie sous les pressions inflationnistes : étude analytique (2010–2025)

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Abstract:

This study investigates the evolution of the Zakat nisab in Algeria (2010–2025) amid inflation, currency devaluation, and gold price fluctuations. Using annual data and mixed analytical methods, it finds strong correlations between the nisab and inflation, gold prices, and exchange rates. The research proposes the nisab as a complementary macroeconomic indicator within Islamic economic analysis, while recognizing its structural and temporal limitations. These findings contribute to integrating Sharia-based metrics into mainstream economic assessments.

Keywords: Zakat nisab; inflation, gold prices; exchange rates; Sharia-compliant indicators; Islamic economics; Algeria.

Jel Classification Codes: E31; C22; P51; Z12

Résumé:

Cette étude examine l'évolution du nisab de la Zakat en Algérie (2010–2025) dans un contexte d'inflation, de dévaluation de la monnaie et de fluctuations des prix de l'or. En s'appuyant sur des données annuelles et des méthodes d'analyse mixtes, elle révèle de fortes corrélations entre le nisab et l'inflation, les cours de l'or et les taux de change. La recherche propose le nisab comme un indicateur macroéconomique complémentaire dans l'analyse économique islamique, tout en reconnaissant ses limites structurelles et temporelles. Ces résultats contribuent à l'intégration des métriques conformes à la charia dans les évaluations économiques traditionnelles.

Mots clés: nisab de la zakat ; inflation ; prix de l'or ; taux de change ; indicateurs conformes à la charia ; économie islamique ; Algérie.

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1. INTRODUCTION

In the aftermath of profound global economic disruptions—most notably following the COVID-19 pandemic—there is an increasing demand for alternative reference indicators that effectively capture deep structural shifts such as inflationary trends, purchasing-power erosion, exchange-rate volatility, and surging commodity costs. Within this framework, the Zakat nisab emerges as a Sharia-compliant economic variable with both financial and social significance.

Because the nisab is defined by the market value of 85 grams of pure gold, any variation in gold prices or fluctuations in the local currency's value is directly mirrored in its level. Accordingly, tracking the nisab over time offers an indirect yet insightful gauge of inflationary pressures and changes in purchasing power in the Algerian economy, interpreted through the lens of Islamic economic principles.

This study provides an analytical assessment of the Zakat nisab as a prospective complementary macroeconomic indicator, integrating its Islamic jurisprudential foundations with conventional economic variables. It examines the practical viability of incorporating the nisab into broader Islamic economic analysis, particularly in contexts that lack normative legitimacy combined with quantitative robustness.

1.1 Research Problem:

Given the interplay between the Zakat nisab, global gold prices, and exchange-rate movements—and their joint impact on purchasing power in Algeria—this study addresses the following central question:

What extent does the evolution of the Zakat nisab in Algeria from 2010 to 2025 reflect inflationary pressures, exchange-rate fluctuations, and gold-price volatility? Moreover, can the nisab function as a complementary macroeconomic indicator within Islamic economic analysis?

1.2 Research Hypothesis

This investigation is built on the hypothesis that there exists a strong positive correlation between the Zakat nisab in Algeria and inflation, and that the nisab serves as an indirect indicator of macroeconomic fluctuations,

primarily driven by gold-price movements and the Algerian dinar's exchange rate.

1.3 Significance of the Study

This research makes several scholarly contributions by:

- Illuminating an underutilized yet legitimate financial indicator for contemporary economic analysis.
- Providing a quantitative evaluation of the Zakat nisab as a proxy for purchasing-power erosion in an environment characterized by high inflation and currency volatility.
- Bridging Sharia-based financial metrics such as the nisab—with mainstream macroeconomic constructs, thereby enriching the literature on Islamic economics and alternative indicators.

1.4 Research Objectives

This study seeks to:

- Chart the evolution of the Zakat nisab in Algeria from 2010 to 2025.
- Identify the principal economic factors—especially gold prices and the USD/DZD exchange rate that drive this evolution.
- Analyze the correlation between the nisab and inflation rates.
- Propose the Zakat nisab as a complementary indicator within an Islamic macroeconomic framework.
- Delineate the methodological and structural limitations of employing the nisab as an economic metric.

1.5 Data Collection and Analytical Tools

The analysis employs annual data (2010–2025) on:

- Zakat nisab values (in Algerian dinars) as published by the Algerian Ministry of Religious Affairs and Endowments.
- Inflation rates obtained from FRED and Trading Economics.
- Global gold prices (per ounce and per gram) sourced from Goldpricez and MacroTrends.
- USD/DZD exchange rates reported by the Banque d'Algérie and Investing.com.

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- These datasets were consolidated into spreadsheets and examined using descriptive statistics, time-series plots, and bivariate correlation analysis.

Methodology

A mixed-methods approach was adopted:

- Descriptive Analysis to trace the temporal trajectory of the Zakat nisab and benchmark it against inflation, gold prices, and exchange-rate dynamics.
- Correlation Analysis to empirically test the relationships between the nisab and each macroeconomic variable. The analysis incorporates year-on-year growth calculations, relative change metrics, and trend synchronization via graphical and statistical techniques.

2. Theoretical and Conceptual Framework: Zakat Nisab and Inflation (Revised)

2.1 The Concept of Zakat and Its Nisab in Islamic Jurisprudence

A. Prerequisites for Zakat Obligation:

Zakat constitutes one of the five fundamental pillars of Islam and is governed by specific juridical conditions that must be satisfied for its validity. These conditions include: complete ownership (milk tām) of wealth, the elapse of one lunar year (ḥawl) subsequent to reaching the minimum threshold (nisab), and unrestricted control over asset disposition (tamakkun min al-taşarruf). The fulfillment of these conditions establishes the legal basis for zakat liability in Islamic jurisprudence. (Ibn Haddou, 2022, p. 112)

B. Definition and Calculation Framework of Nisab:

The nisab represents the minimum quantum of wealth that triggers zakat obligation. Within the Maliki school of jurisprudence, which constitutes the predominant madhab in Algeria, the nisab is established at the equivalent value of 85 grams of pure gold, with annual adjustments based on prevailing local gold market prices. This gold-based standard provides a stable benchmark that reflects intrinsic value rather than fiat currency fluctuations. (Ibn Haddou, 2022, p. 115)

C. Economic Determinants of Nisab Valuation:

The nisab's monetary value is influenced by several interconnected economic variables: (Khalil & Ben Nouna, 2022, p. 5)

- **Global and domestic gold prices:** These constitute the primary determinant of nisab valuation in local currency terms, as the threshold is intrinsically linked to gold's market value.
- **Exchange rate dynamics (USD/DZD):** Currency exchange rates exert indirect influence on local gold prices, thereby affecting the nisab's purchasing power parity.
- **Inflationary pressures:** Rising price levels typically correlate with increased gold valuations, subsequently elevating the nisab threshold and potentially affecting zakat liability

2.2 The Concept of Inflation: From Classical Economics to Islamic Finance

A. Theoretical Foundations of Inflation in Macroeconomic Analysis: Contemporary macroeconomic theory identifies multiple sources of inflationary pressure: (Khalil & Ben Nouna, 2022, p. 5)

- **Monetary inflation:** Results from excessive money supply growth that exceeds the productive capacity of the economy, leading to general price level increases.
- **Cost-push inflation:** Triggered by rising input costs, particularly energy and imported commodities, which propagate through the supply chain.
- **Structural inflation:** Emerges from persistent imbalances in fiscal frameworks and production systems, creating sustained price pressures.

B. Islamic Economic Perspectives on Inflation:

Islamic financial thought conceptualizes inflation as a manifestation of currency debasement that undermines the foundational objective (maqṣad) of wealth preservation (ḥifẓ al-māl) within the maqāṣid al-sharī'ah framework. This perspective emphasizes the importance of maintaining purchasing power stability to protect societal welfare and economic justice.

C. Inflation and Purchasing Power Dynamics

Inflation represents a tangible erosion of monetary purchasing power, reflecting the diminishing capacity of currency units to acquire goods and

services. Islamic economic theory posits that zakat serves as an effective mechanism for reducing idle monetary accumulation while enhancing economic circulation and productive investment. (Masoudi, 2016, p. 32)

2.3 Theoretical Nexus Between Gold, Currency, and Inflation

A. Gold-Nisab Correlation:

Given the gold-based calculation of nisab, any appreciation in gold prices (denominated in local currency) directly elevates the zakat threshold. This relationship creates a natural hedging mechanism that maintains the nisab's real value relative to inflationary pressures. (Ibn Haddou, 2022, p. 120)

B. Exchange Rate Impact on Currency Valuation

Depreciation of the Algerian dinar significantly affects local gold prices, consequently raising the nisab threshold and serving as an indirect indicator of currency devaluation pressures. This relationship establishes the nisab as a potential proxy for monetary stability assessment. (Masoudi, 2016, p. 32)

Conceptual Integration Framework This theoretical framework rests upon an integrated tripartite structure:

- **Jurisprudential foundation:** Grounded in Islamic legal principles governing zakat and nisab determination
- **Monetary dynamics:** Encompassing inflation mechanisms and exchange rate fluctuations
- **Real value anchor:** Utilizing gold as a stable store of value reference

This integration positions the zakat nisab as a hybrid Sharia-compliant economic indicator capable of reflecting inflationary pressures and purchasing power erosion within the broader macroeconomic context. The framework demonstrates how Islamic economic principles can provide alternative analytical tools for understanding monetary and price dynamics in contemporary economic systems.

3. Analysis of the Evolution of the Zakat Nisab in Algeria (2010–2025)

3.1 Annual Evolution of the Nisab Value

The Zakat nisab in Algeria is defined as the market value of 85 grams of pure gold, thereby linking its annual valuation directly to international

gold - price fluctuations and the USD/DZD exchange rate. Over the 2010 – 2025 period, the nisab exhibited a steady upward trend in its first decade, followed by pronounced increases after 2020.

Table N°1: Official Zakat Nisab Values in Algeria (2010–2025)

Year	Zakat Nisab (DZD)
2010	335,750
2011	467,500
2013	501,500
2014	395,250
2015	350,000
2016	450,500
2017	450,500
2018	552,500
2019	582,250
2020	705,500
2021	731,000
2022	816,000
2023	892,500
2024	1,105,000
2025	1,615,000

Source: Published by the Algerian Ministry of Religious Affairs and Endowments, Annual Zakat Nisab Bulletins (2010–2025).

3.2 Annual Growth - Rate Observations

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Between 2010 and 2015, the Zakat nisab exhibited modest variation, remaining broadly stable between 395 000 and 501 000 DZD. From 2016 to 2019, a gradual upward trajectory emerged, driven chiefly by increases in domestic gold prices. During 2020–2023, global inflationary pressures following the COVID-19 pandemic precipitated a more sustained and accelerated rise in the nisab. In 2024–2025, the nisab value surged by approximately 46 percent, reflecting a severe economic shock likely attributable to soaring gold prices compounded by significant depreciation of the Algerian dinar.

3.3 Graphical Trends and Pattern Analysis

A time-series plot of the Zakat nisab from 2010 through 2025 reveals a predominantly upward trend interspersed with brief intervals of stabilization or slight decline (e.g., 2014–2015). Notable inflection points correspond to major global crises: the post-2020 COVID-19 spike and the 2022 Russia–Ukraine conflict. The nisab reached an unprecedented high in 2025, exceeding 1.6 million DZD for the first time.

3.4 Economic Interpretation of Nisab Fluctuations

- **COVID-19 Pandemic (2020):** Broad monetary easing policies worldwide induced inflation and elevated gold prices, translating into a 21 percent increase in the nisab relative to 2019.
- **Russia–Ukraine Conflict (2022):** Geopolitical tensions drove up energy and metal costs while weakening local currencies, including the Algerian dinar, thus triggering successive increases in the nisab.
- **Peak in 2025:** A dramatic 46 percent year-on-year rise reflects intensified inflationary pressures, likely resulting from record gold prices, accelerated dinar depreciation, or both.

Overall, the temporal dynamics of the Zakat nisab demonstrate its high sensitivity to major macroeconomic events. The strong positive correlation between nisab movements and inflationary or currency-devaluation trends substantiates the hypothesis that the Zakat nisab can serve as a complementary macroeconomic indicator within Islamic economic analysis.

4. The Relationship between Zakat Nisab and Inflation in Algeria

4.1 Annual Comparison of Zakat Nisab and Inflation

This section examines the co-movement of the Zakat nisab and

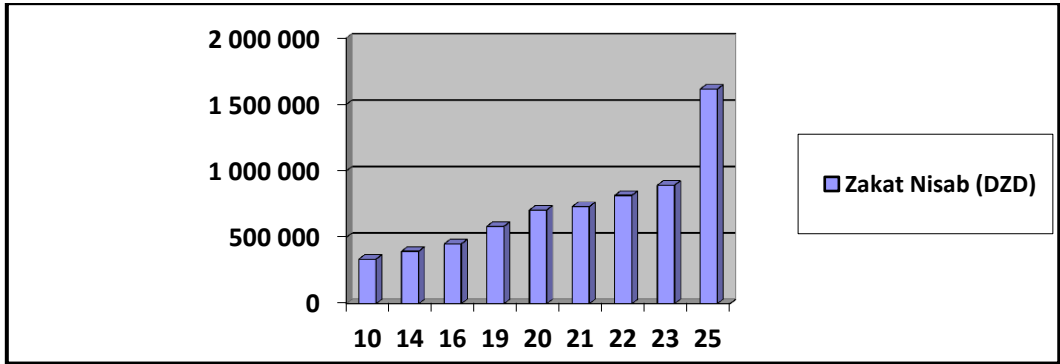
Algeria’s official annual inflation rate from 2010 to 2025 to determine whether their trajectories align or diverge.

Table N°2: Comparative Evolution of Zakat Nisab and Inflation Rates in Algeria (2010–2025)

Year	Zakat Nisab (DZD)	Inflation Rate (%)	Commentary
2010	335 750	3.9	Moderate growth in both nisab and inflation.
2014	395 250	2.9	Nisab remained stable despite declining oil revenues.
2016	450 500	6.4	Inflation surge accompanied by a corresponding increase in nisab.
2019	582 250	2.0	Low inflation occurred alongside steady nisab appreciation.
2020	705 500	2.4	Initial pandemic effects—mild inflation and rising nisab.
2021	731 000	7.2	Post-pandemic inflation spike reflected in nisab increment.
2022	816 000	9.3	Global inflationary pressures elevated both consumer prices and the gold-based nisab.
2023	892 500	9.7	Continued upward momentum in both indicators.
2025*	1615 000	8.5	Nisab peaked despite a slight moderation in inflation, implying additional drivers.

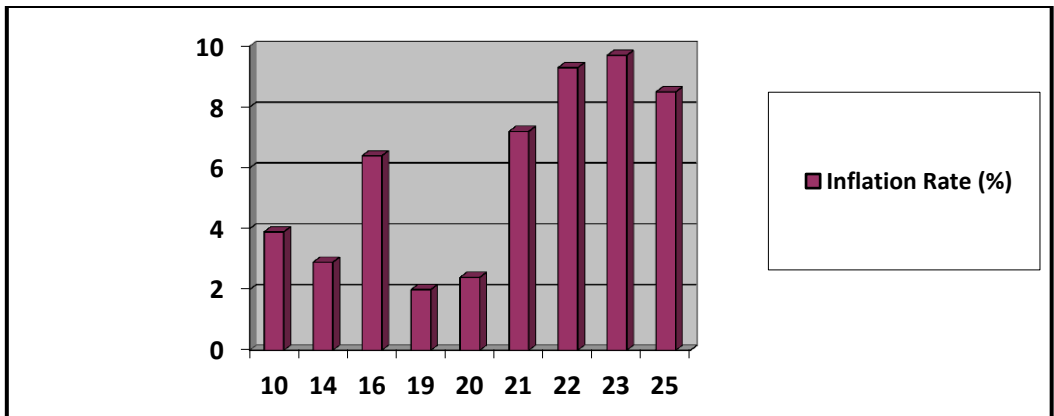
Source: Bank of Algeria; Ministry of Religious Affairs; IMF; Trading Economics; author’s calculations.

Fig N° 1: Zakat Nisab and Inflation, 2010–2025



Source: Author’s calculations based on official Zakat Nisab data.

Fig N° 2: Inflation Rate (%)



Source: Author’s calculations based on official Zakat Nisab data.

The nisab exhibits a clear upward trend, especially after 2019, while inflation shows greater volatility, with pronounced increases post-2021. Although periods of higher inflation often coincide with nisab increases, the latter is growth consistently outpaces inflation, underscoring the influence of gold-price and exchange rate dynamics.

Table N°3: Summary Table of Annual Changes in Zakat Nisab (2010–2025)

Year	Zakat Nisab (DZD)	(%) Annual Change
2010	335,750	–
2011	467,500	%39.2+
2013	501,500	%7.3+
2014	395,250	%21.2-
.....
2025	1,615,000	+46.0%

Source: Prepared by the researcher.

- The Zakat Nisab experienced notable increases during specific years, with the most significant surge occurring between 2024 and 2025.
- Periods of relative stability are evident, particularly between 2016 and 2017.
- The marked decline in 2014 deviates from typical inflationary patterns, suggesting the influence of external factors such as fluctuations in gold prices or shifts in monetary policy.

4.2 Qualitative Analysis of Variable Interactions

- **Indirect Inflationary Impact:** As the nisab is pegged to gold, general price-level rises elevate gold prices, thereby increasing the nisab.
- **Leading Indicator Potential:** The annual nisab is announced each January based on December’s gold market conditions, which may anticipate forthcoming inflationary trends.
- **Proxy for Purchasing Power:** Rapid nisab escalation (e.g., 2020–2025) signals severe dinar depreciation, steep rises in consumer prices, and erosion of household purchasing power. (International Monetary Fund (IMF), 2023)

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A partial positive correlation exists between Zakat nisab and inflation. The nisab’s stronger growth trajectory suggests it functions as an auxiliary indicator of currency devaluation and real purchasing power shifts.

Table N°4: Correlation Between Zakat Nisab and Key Economic Variables

Variable	Correlation with Nisab
Inflation Rate	(High) 0.74
Gold Price (DZD/g)	(Very High) 0.91
Exchange Rate (USD/DZD)	(Very High) 0.87

Source: Prepared by the researcher.

- The Zakat Nisab is highly sensitive to the local gold price and the USD/DZD exchange rate, reflecting strong responsiveness to external market conditions.
- Inflation exhibits a secondary yet significant influence on the evolution of the Nisab.

5. Impact of Gold Prices and Exchange Rates on Zakat Nisab

5.1 Gold-Price Determinants of the Nisab:

- **Calculation:** Zakat Nisab (DZD) = 85 g × (price of 24K gold per gram in DZD).
- **Trend:** Gold prices climbed from ~2 900 DZD/g in 2010 to ~19 000 DZD/g in 2025, driving the nisab from 335 750 DZD to 1 615 000 DZD.
- **Drivers:** Heightened global safe-haven demand, persistent dinar depreciation, and monetary-policy uncertainty. (Goldpricez, 2024)

5.2 Exchange-Rate Effects on the Nisab

The USD/DZD rate critically influences the nisab since gold is globally USD-priced. Dinar depreciation amplifies local gold - price denominated nisab even if the USD-price of gold remains constant. For instance:

- At \$60/g and 100 DZD/USD, nisab = 85 × (60 × 100) = 510 000

DZD.

- At \$60/g and 200 DZD/USD, nisab = 1 020 000 DZD.

Zakat nisab responds directly to domestic gold - price shifts and indirectly to exchange - rate movements, reflecting monetary - policy efficacy and currency devaluation. (Trading Economics, 2024)

Table N°5: Estimated Impact of Gold Price and Exchange Rate on Zakat Nisab (Simplified Model)

Year	Gold Price (DZD/gram)	USD/DZD	Calculated Nisab (85g × Price)
2010	3,950	74	335,750
2020	8,300	130	705,500
2025	19,000	155	1,615,000

Source: Prepared by the researcher.

- The Zakat Nisab closely follows fluctuations in the gold price denominated in Algerian dinars.
- Depreciation of the Algerian dinar significantly contributes to increased local gold prices, thereby elevating the Nisab, even when global gold prices remain constant.

The Zakat Nisab in Algeria from 2010 to 2025 demonstrates strong linkages with macroeconomic variables, particularly gold prices and exchange rates, with inflation playing a notable but secondary role. While it cannot replace traditional inflation indices, the Nisab offers a valuable Shariah-compliant economic indicator that reflects real purchasing power changes in inflationary and currency-volatile environments. Its annual update frequency and sensitivity to global gold markets should be considered when interpreting its trends for economic analysis or policy formulation.

6. Zakat Nisab as a Complementary Economic Indicator in Islamic Economics

6.1 Indicator Comparison:

Table N°6: Comparing the "Zakat Indicator" with CPI and CPIX

Indicator	Definition	Strengths	Limitations
CPI	Consumer Price Index	Frequent updates; reflects consumption mix	Sensitive to basket composition; excludes asset price dynamics
CPIX	Core Inflation (excluding food and energy)	Highlights underlying inflation trends	Omits key household expenditure categories
Zakat Nisab	Value of 85 g of 24K gold (in DZD)	Sharia-compliant; gold-backed; inflation-hedged	Annual frequency; exposed to global gold-market fluctuations; lacks seasonal adjustment

Source: Prepared by the author, based on comparative analysis of inflation indicators (CPI, CPIX) and official Zakat Nisab values in Algeria.

The nisab serves as a gold - based monetary indicator, capturing real currency value through a time - tested, inflation-resistant standard that complements CPI - based measures.

Table N°7: Comparative Overview of Economic Indicators: CPI, CPIX, and Zakat Nisab

Indicator	Update Frequency	Sensitivity to Inflation	Shariah-Based	Sensitivity to Gold/FX
CPI	Monthly	High	No	Low
CPIX	Monthly	Medium	No	Low
Nisab	Annually	Indirect	Yes	Very High

Source: Prepared by the researcher.

- The Zakat Nisab does not substitute for conventional inflation

measures such as CPI or CPIX but provides a complementary perspective grounded in Islamic economic principles.

- Its pronounced sensitivity to gold prices and foreign exchange rates renders it particularly relevant in contexts characterized by inflationary pressures or currency depreciation.

6.2 Limitations of the Nisab

- Annual Disclosure Lag: Unsuitable for real-time monitoring.
- Global Gold - Market Susceptibility: External price shocks may distort local economic assessment.
- Nominal Valuation: Absence of inflation adjustment limits comparability with dynamic indicators.

Despite its constraints, Zakat nisab offers a valuable complementary gauge of purchasing power and currency stability in Islamic economies. Its integration with conventional indices can enrich macroeconomic analysis by incorporating a faith-aligned, asset-backed perspective.

7. CONCLUSION

This study has examined the evolution of the Zakat nisab in Algeria from 2010 to 2025, focusing on its responsiveness to inflationary pressures and monetary instability. The analysis assessed annual changes in the nisab and its correlation with key macroeconomic variables, including the inflation rate, local gold prices, and the exchange rate of the Algerian dinar against the US dollar.

The results indicate a robust positive correlation between the zakat nisab and the inflation rate, as well as a direct relationship with local gold prices. These findings suggest that the nisab serves as an indirect indicator of broader economic transformations in Algeria, particularly in the aftermath of the COVID-19 pandemic, global energy shocks, and significant currency depreciation.

The study demonstrates that the zakat nisab functions as an alternative quantitative measure of declining purchasing power. Its calculation, anchored to a stable physical benchmark—gold—confers credibility in contexts where conventional monetary indicators may be unreliable or unavailable. Nevertheless, reliance on this indicator should be tempered by

awareness of its sensitivity to international gold market fluctuations and the infrequency of its updates.

7.1 Recommendations

Based on the study's findings, the following recommendations are advanced:

- **Integration into Islamic Economic Analysis:**

Incorporate the zakat nisab as a complementary analytical tool in Islamic economic research, especially in studies addressing monetary inflation and income-based poverty, alongside established indicators such as the Consumer Price Index (CPI) and Core CPI (CPIX).

- **Regular Updates to Enhance Responsiveness:**

Encourage relevant authorities, such as the Ministry of Religious Affairs, to issue quarterly or semi-annual updates to the zakat nisab. This would improve the indicator's responsiveness to rapid changes in gold prices and currency values, thereby enhancing its real-time analytical utility.

- **Development of a Real Zakat Nisab Index:**

Support the efforts of research institutions and statistical agencies to develop a "real zakat nisab" index, adjusted for inflation. This would bridge the gap between nominal and real values, increasing the indicator's accuracy in comparative economic analysis.

- **Policy Application in Social Protection:**

Employ the zakat nisab as a qualitative indicator of household purchasing power in the formulation of social protection policies. This approach could inform the recalibration of poverty thresholds and the targeting of zakat and social assistance programs within Islamic economic frameworks.

- **Advanced Econometric Research:**

Promote further empirical research to investigate the causal relationships between zakat nisab and macroeconomic variables such as inflation, exchange rates, and GDP, utilizing advanced econometric techniques (e.g., VAR, ARDL, and cointegration models).

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