



The potential of the bullion business in accelerating financial inclusion: A theoretical review of Pegadaian's strategic role

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ABSTRACT

Background: Formalizing bullion banking in Indonesia represents a strategic financial evolution catalyzed by the Law on the Development and Strengthening of the Financial Sector (P2SK) and OJK Regulation No. 17 of 2024. This study aims to construct a macroeconomic value proposition for the bullion business scheme, identifying it as a critical driver for strengthening the "People's Economy" (*Ekonomi Kerakyatan*). Literature traditionally views gold as a passive pawn commodity, yet recent shifts suggest its potential as an active gateway for the unbanked. **Methods:** This research utilizes a qualitative systematic literature review guided by PRISMA principles, synthesizing academic and regulatory data from 2015–2025. The theoretical framework integrates Financial Intermediation and Vulnerability-Stress-Adaptation (VSA) theories to analyze economic resilience. **Findings:** The bullion ecosystem acts as a "formalization engine" capable of mobilizing 1,800 to 2,600 tons of idle household gold, potentially adding IDR 245 trillion to the national GDP and creating 1.8 million jobs. The study finds that digital fractional ownership allows micro-savers to accumulate assets starting at 0.01 grams, effectively democratizing credit for 66 million MSMEs. By using gold as a universal intermediary, PT. Pegadaian eliminates "credit rationing," protecting grassroots purchasing power against inflation as posited by VSA theory. **Conclusion:** Bullion banking transcends traditional services to become a strategic pillar of national sovereignty, transforming passive ornaments into active capital. This model successfully addresses the dimensions of accessibility and usage within the Indonesian inclusive economy. **Novelty/Originality of this article:** This study uniquely links the bullion model specifically to *Ekonomi Kerakyatan*, providing the first post-2025 macroeconomic projection of gold banking's impact on Indonesia's structural financial resilience.

KEYWORDS: bullion banking; financial inclusion; gold ecosystem; MSME; PT. Pegadaian.

1. Introduction

In the contemporary global landscape, financial inclusion has emerged as a critical pillar for sustainable economic growth and poverty reduction. Defined as the universal availability and accessibility of affordable formal financial services, financial inclusion ensures that marginalized populations can manage their wealth and mitigate economic risks effectively (Mwakalila & Muba, 2025). Within the Indonesian context, despite significant progress in banking penetration, a substantial portion of the population remains underserved by traditional banking institutions, particularly in rural and low-income segments. Amidst global economic volatility and inflationary pressures, gold has reaffirmed its status as a premier safe-haven asset and a reliable store of value (Asikhia et al., 2021).

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The cultural affinity for gold in Indonesia, combined with its intrinsic stability, positions precious metals as a strategic bridge for integrating the unbanked population into the formal financial ecosystem.

The emergence of the bullion business comprising gold-based savings, financing, trading, and custody, represents a transformative shift in the national financial architecture. Recently, the Indonesian government and the Financial Services Authority (OJK) formalized this industry through POJK Number 17 of 2024, which provides the legal framework for bullion banking operations. This regulatory milestone allows financial institutions to manage gold not merely as a physical commodity but as a liquid financial instrument. This shift is particularly significant given the dead capital phenomenon, where trillions in household wealth are trapped in the form of jewelry that does not yield interest or support credit expansion. PT. Pegadaian, as a state-owned enterprise with a pervasive network of over 4,000 outlets and a legacy of gold-backed lending, stands at the epicenter of this evolution. By transitioning from a traditional pawnshop model to a comprehensive bullion provider, Pegadaian possesses the unique capacity to mobilize idle gold.

The economic rationale for this transition is deeply rooted in the need for a more resilient People's Economy. In an era of fiat currency fluctuations, the dependency on traditional banking often leaves the grassroots economy vulnerable to external shocks. A bullion-integrated system creates a decentralized reserve of wealth that retains its purchasing power regardless of local currency devaluation. By formalizing gold as a financial asset, the state can leverage domestic gold reserves to strengthen the national balance of payments while simultaneously providing a high-quality collateral base for micro and small enterprises (MSMEs). This dual-layered benefit for macroeconomic stability paired with microeconomic empowerment forms the core of the bullion business value proposition.

Theoretically, this study is grounded in the Financial Intermediation Theory, which posits that institutions like Pegadaian reduce transaction costs and information asymmetry by acting as a conduit between surplus units (gold savers) and deficit units (borrowers needing gold-backed financing) (Molnár, 2018). Furthermore, the Public Good Theory of Financial Inclusion suggests that state-led interventions through institutions like Pegadaian can democratize access to wealth-building tools that were previously reserved for high-net-worth individuals (Singh et al., 2025). However, a significant gap remains in the existing literature: while previous studies have focused on gold prices as a macroeconomic indicator or the legal aspects of bullion banking, there is a dearth of theoretical exploration regarding how the specific operational integration of bullion services functions as an ESG-driven (Environmental, Social, and Governance) financial innovation. Specifically, current research fails to explain how the transformation of dead capital into liquid assets aligns with the social pillar of ESG by fostering systemic equity and inclusive finance for the unbanked. There is limited understanding of how such a non-bank financial framework can directly accelerate financial inclusion metrics and provide sustainable governance of household wealth in an emerging market like Indonesia.

Consequently, this manuscript aims to evaluate the strategic potential of the bullion business in fostering financial inclusion by analyzing Pegadaian's unique institutional advantages. This research is pivotal as it bridges the conceptual divide between traditional commodity trading and modern inclusive finance. This research specifically investigates the transformative potential of a gold-based ecosystem by addressing a threefold primary objective. First, it undertakes a comparative regulatory analysis to evaluate international bullion business regulations and practices, establishing a strategic benchmark to refine Pegadaian's operational framework. Second, it develops a theoretical synthesis of inclusion, examining how democratized access to a comprehensive gold ecosystem can effectively lower the barriers to formal finance and reduce the proportion of the unbanked population in Indonesia. Finally, the study seeks to construct a macroeconomic value proposition for the bullion business scheme, identifying it as a critical driver for strengthening the People's Economy.

By addressing these objectives, this manuscript establishes its originality through a multi-dimensional approach that integrates ESG principles with localized economic imperatives. The theoretical synthesis proposed herein suggests that a gold-integrated financial ecosystem mitigates the limitations of traditional currency-based savings by providing a more culturally resonant and stable asset class for marginalized groups. Consequently, it is hypothesized that the adoption of a structured bullion business model by Pegadaian will significantly enhance the financial resilience of low-income segments, thereby fostering broader macroeconomic stability and sustainable national growth.

To ensure a rigorous and transparent evaluation of the bullion business as a driver for the People's Economy, this study employs a qualitative systematic literature review methodology. The process is strictly guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement, ensuring that the evidence synthesized is both contemporary and relevant to the Indonesian financial landscape between 2015 and 2025. This systematic approach allows for a structured identification, screening, and inclusion of diverse data sources, ranging from theoretical academic journals to recent regulatory frameworks, thereby minimizing bias and maximizing the reliability of the constructed macroeconomic value proposition.

The data collection strategy involved a multi-layered search across global and domestic databases, including Scopus, Web of Science, and Google Scholar, as well as institutional repositories from the Financial Services Authority / *Otoritas Jasa Keuangan* (OJK), Bank Indonesia (BI), and the Indonesian Ministry of Economic Affairs. To maintain high analytical quality, the search was constrained to a ten-year timeframe (2015–2025) to capture the rapid evolution of digital gold technologies and the implementation of POJK 17/2024. Inclusion criteria prioritized studies centered on emerging markets and those specifically addressing the intersection of ESG-compliant precious metal management, financial intermediation, and the empowerment of MSMEs within the Indonesian archipelago.

As a literature-based study, the analytical method centers on Theoretical Synthesis and Thematic Coding. The gathered data is processed through three primary theoretical lenses: Financial Intermediation Theory, used to analyze how PT. Pegadaian reduces transaction costs for the unbanked; Vulnerability-Stress-Adaptation (VSA) Theory, used to evaluate gold's role as a macroeconomic shock absorber for the poor; and Public Good Theory, to assess the state's mandate in providing democratized financial infrastructure. By synthesizing these perspectives, the study constructs a cohesive narrative that links the formalization of gold reserves directly to the indicators of People's Economy, ESG-driven financial equity and broader national economic stability.

2. Methods

2.1 Research approach and paradigm

This study is rooted in a constructivist ontology, perceiving financial inclusion not as a static metric but as a dynamic social construct shaped by institutional policies and cultural valuation of assets such as gold. Epistemologically, the research adopts an interpretivist approach, synthesizing existing literature and regulatory frameworks to construct a new theoretical proposition for bullion banking in Indonesia (Snyder, 2019). This perspective allows the study to go beyond purely quantitative measurements, emphasizing the meaning-making processes of stakeholders, including regulators, financial institutions, and society at large. In this context, gold is not merely treated as a financial asset, but also as a culturally embedded store of value that influences financial behavior and decision-making. Therefore, the interpretivist lens provides a nuanced understanding of how bullion banking can serve as a bridge between formal financial systems and traditionally held forms of wealth, particularly in emerging economies such as Indonesia.

2.2 Research design: Systematic Literature Review (SLR)

This research utilizes a Systematic Literature Review (SLR) methodology, adhering to the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to ensure a rigorous and transparent selection of research materials (Page et al., 2021; Norlita et al., 2023). This approach enables the study to systematically identify, screen, and evaluate relevant literature based on predefined inclusion and exclusion criteria, thereby minimizing selection bias and enhancing the reliability of the findings. Furthermore, the use of PRISMA 2020 facilitates reproducibility and methodological consistency, allowing future researchers to replicate or extend the review process. Through this structured method, the study aims to synthesize existing knowledge comprehensively while identifying research gaps and emerging trends within the field.

2.3 Data sources and identification process

The systematic process began with the identification stage, where data were retrieved from high-impact databases such as Google Scholar, Scopus, and ScienceDirect, as well as institutional repositories from Financial Services Authority / *Otoritas Jasa Keuangan* (OJK), Bank Indonesia (BI), and PT. Pegadaian. This was supplemented by official repositories using keywords such as bullion banking, financial inclusion Indonesia, and gold ecosystem. To enhance the comprehensiveness of the search, Boolean operators (e.g., and, or) and keyword variations were applied to capture a broader range of relevant studies. Following the identification stage, the screening process was conducted by removing duplicate records and evaluating titles and abstracts based on predefined inclusion and exclusion criteria. Articles were included if they were peer-reviewed, relevant to financial inclusion, gold-based financial systems, or regulatory frameworks, and published within a specified time frame. Subsequently, the eligibility stage involved a full-text assessment to ensure the selected studies provided substantive contributions to the research objectives. This rigorous selection process ensures the reliability, transparency, and replicability of the literature review.

2.4 Screening and eligibility criteria

In the screening stage, records were filtered by publication year (2015–2025) to ensure contemporary relevance, particularly in relation to the P2SK Law era. Initial records (n = 142) were screened, with duplicate entries and non-English/non-Indonesian titles removed. During the eligibility assessment, the remaining full-text articles (n = 58) were evaluated against specific criteria. The inclusion criteria required: (a) focus on non-bank financial institutions, (b) discussion of gold-backed microfinance, or (c) regulatory analysis of POJK No. 17/2024. The exclusion criteria applied to: (a) technical mineralogical studies of gold mining, (b) purely speculative gold price forecasting, and (c) studies lacking relevance to Indonesian inclusive finance.

2.5 Final inclusion and data corpus

The final stage involved the inclusion of peer-reviewed journal articles and regulatory documents for qualitative synthesis (Page et al., 2021). The materials analyzed comprise primary regulatory documents, including POJK No. 17 of 2024 and Law No. 4 of 2023 (P2SK), as well as institutional data from PT. Pegadaian's annual reports and strategic documents, particularly focusing on gold savings performance. To ensure analytical rigor, the selected materials were systematically coded and categorized based on key themes, such as financial inclusion, asset formalization, and the institutionalization of bullion banking. A thematic analysis approach was employed to identify patterns, relationships, and conceptual linkages across the literature and regulatory frameworks. This process enabled the study to develop an integrative perspective on how regulatory support and institutional

readiness interact in transforming gold from a passive store of value into an active financial instrument. Furthermore, the synthesis emphasizes the alignment between policy direction and market implementation, highlighting the strategic role of state-owned enterprises in bridging informal asset ownership with formal financial systems. Through this approach, the study not only consolidates existing knowledge but also contributes to the development of a novel conceptual framework for bullion banking in Indonesia.

2.6 Analytical framework and modeling assumptions

To ensure transparency in the macroeconomic value proposition, the study applies a multiplier effect logic. It assumes a 60% mobilization rate of idle household gold (estimated at 1,800–2,600 tons) converted into liquid credit, applying a standard velocity of circulation coefficient aligned with Indonesia's MSME sector contribution to GDP (approximately 61%). These are complemented by secondary data from academic literature on the People's Economy and global benchmarks such as India's Sovereign Gold Bonds. This modeling approach provides a simplified yet policy-relevant estimation framework to illustrate the potential macroeconomic impact of integrating gold-based assets into the formal financial system.

2.7 Data analysis technique

The study employs the Miles & Huberman (1994) model for qualitative data analysis, which consists of three main steps: data condensation, data display, and conclusion drawing. Data condensation was conducted by coding information into thematic categories, including Regulatory Alignment, Institutional Capacity, and Socio-Economic Impact. Data display was presented through comparative tables and conceptual frameworks (Tshabangu et al., 2021). Finally, conclusions were drawn through logical deduction to establish the theoretical linkage between Pegadaian's physical infrastructure and the Public Good Theory of Financial Inclusion.

3. Results and Discussion

3.1 Comparative regulatory analysis: International benchmarks for bullion banking

The following table summarizes the selection process of the literature used to benchmark Indonesia's bullion regulations against international practices (India and Turkey) between 2015 and 2025 (Sarkis-Onofre et al., 2021). The author specifically selected India and Turkey as primary comparisons because they represent the most advanced emerging market models for gold financialization, where significant volumes of under-the-pillow gold have been successfully integrated into the formal banking system to enhance national liquidity. India's Gold Monetization Scheme (GMS) and Turkey's Gold Storage Accounts provide proven regulatory blueprints for transforming idle physical commodities into productive financial assets, offering Indonesia a strategic roadmap for mobilizing its own domestic gold reserves to drive financial inclusion (Sarkar, 2021).

The systematic literature selection process, as summarized in Table 1, demonstrates a rigorous filtering mechanism designed to ensure that only high-quality, relevant, and contemporary evidence was synthesized for the comparative regulatory analysis. The process began with the Identification stage, yielding 142 records from prestigious databases (Scopus, ScienceDirect, and Google Scholar) and official regulatory repositories. This broad initial scope was necessary to capture the multi-disciplinary nature of bullion banking, spanning finance, law, and public policy. By specifically targeting keywords related to India and Turkey, the search successfully captured the best practice benchmarks of nations with mature gold monetization schemes, providing a solid foundation for comparing Indonesia's emerging framework against established global standards.

Table 1. PRISMA literature selection summary

Stage	Process description	Records found/remaining
Identification	Initial search on Google Scholar, Scopus, and ScienceDirect using keywords: bullion banking India, gold monetization Turkey, POJK 17/2024, and gold banking regulations.	142
Screening	Removal of duplicates and records published before 2015. Screening of titles and abstracts for relevance to comparative law or financial regulation.	85
Eligibility	Full-text assessment of articles to ensure focus on gold-based financial intermediation and formal regulatory frameworks.	32
Included	Final selection of high-impact journals, World Gold Council reports, and OJK/RBI/CBRT regulatory documents for qualitative synthesis.	12

During the Screening phase, the records were reduced to 85 by applying strict temporal boundaries (2015–2025), ensuring the analysis reflects the post-Basel III era and the most recent Indonesian regulatory shifts, such as the P2SK Law (Askandar et al., 2025). This filtering was essential to isolate the impact of gold as a High-Quality Liquid Asset (HQLA), which has redefined its role in modern banking liquidity frameworks. The Eligibility stage involved a granular full-text review, where 32 articles were scrutinized for their specific focus on institutional bullion operations rather than general commodity trading. This phase filtered out purely speculative trading literature to focus on the structural "intermediary" role that institutions like PT. Pegadaian play in fostering long-term capital stability.

Ultimately, 12 core documents were included for final synthesis. These included peer-reviewed journals for theoretical depth and official reports from the World Gold Council and Financial Services Authority / *Otoritas Jasa Keuangan* (OJK) for practical regulatory accuracy. This systematic funneling ensures that the study's conclusions regarding Pegadaian's strategic role are based on a credible and replicable evidence base, mitigating selection bias and enhancing the reliability of the comparative findings. By strictly adhering to this PRISMA-compliant funnel, the research establishes a robust empirical bridge between international bullion mandates and the specific localized goals of Indonesia's People's Economy.

Table 2. Comparative analysis of international bullion regulatory frameworks

Regulatory aspect	India (RBI framework)	Turkey (CBRT framework)	Indonesia (POJK 17/2024)
Core Instrument	Gold Monetization Scheme (GMS) & Revamped GMS (Koutha, 2021).	Gold Storage Accounts & QUATRE System.	Bullion Business (Gold deposits, Financing, Trading) (Askandar et al., 2025).
Incentive Structure	Tax exemptions on interest and capital gains (Income Tax Act 1961/2015) (Sarkar, 2021).	Reserve Requirement Incentives for banks holding gold deposits.	Currently undergoing tax synchronization (VAT/Income Tax gaps) (Pusparini & Budiarsih, 2024).
Strategic Benchmarks for Pegadaian	Standardization of Purity (BIS Certification) and decentralized collection center (Kumar et al., 2023).	Integration of "Under-the-pillow" gold into central bank liquidity (Yakupoğlu & Okur, 2021).	Utilization of 4,000+ outlets as "Bullion Service Points" (Askandar et al., 2025)
Target Inclusion	Rural households and small jewelers (Yakupoğlu & Okur, 2021).	Urban middle-class and digital investors	Unbanked segments and MSMEs.

The analysis reveals that while Indonesia's POJK 17/2024 is structurally sound providing a legal basis for five core bullion activities. It currently lacks the specific fiscal incentives seen in the Indian model, which are proven to accelerate public participation (Askandar et al., 2025). India's success in utilizing Non-Bank Financial Institutions (NBFIs) to mobilize gold provides a direct strategic roadmap for PT. Pegadaian. Specifically, the Indian Revamped GMS model demonstrates that when the government provides clear tax exemptions on interest and capital gains, the psychological barrier to depositing physical gold is significantly lowered, turning dead assets into active interest-bearing accounts. Furthermore, the Turkish model's emphasis on digital-to-physical fungibility serves as a benchmark for Pegadaian's gold savings to evolve into a fully operational bullion account that contributes to national monetary stability. The integration of the QUATRE system in Turkey provides an instructive example of how digital gold ownership can be seamlessly converted into physical liquidity, ensuring that the urban middle class and digital investors remain tethered to the formal banking system during periods of high inflation.

The strategic selection of India and Turkey as comparative benchmarks is grounded in their status as global pioneers in transitioning from a traditional gold-hoarding culture to a formalized bullion banking ecosystem. Both nations possess socio-economic characteristics analogous to Indonesia, most notably a deep-rooted cultural affinity for gold as a primary vehicle for household savings and a significant unbanked population that operates outside traditional fiat-currency systems (Makhmud, 2023). Unlike Western bullion markets that focus primarily on institutional trading, the Indian and Turkish frameworks are specifically designed for retail-level mobilization, making them the most relevant blueprints for Indonesia's People's Economy.

By examining the successful implementation of India's Gold Monetization Scheme (GMS) and Turkey's Reserve Option Mechanism (ROM), this study identifies the critical regulatory triggers, such as fiscal incentives, standardized purity protocols, and decentralized collection networks that Indonesia can adopt through the infrastructure of PT. Pegadaian. A key finding of this comparison is that Pegadaian's vast network of over 4,000 outlets could function as bullion service points similar to India's decentralized collection centers, thereby reducing the logistical barriers for rural households to formalize their assets. This comparison serves not only as a legal reference but also as a practical roadmap for transforming idle physical assets into productive financial capital, thereby strengthening the People's Economy at a macroeconomic level. Ultimately, the transition from a passive hoarding culture to a productive bullion ecosystem requires a synchronized effort between the OJK, the Ministry of Finance, and PT. Pegadaian to resolve the current tax gap and match the competitive incentive structures found in India and Turkey. This synchronization is vital because without a level playing field in taxation, the informal market will continue to offer higher perceived returns than the formalized bullion sector. Consequently, the following table delineates the operational differences between these established global models and the proposed Indonesian framework to highlight the specific gaps in service delivery and asset mobilization.

To further synthesize these findings, Table 3 provides a side-by-side comparison of the operational mechanics across the three jurisdictions. This comparison focuses on how each nation handles the technical aspects of gold custody, interest distribution, and the role of third-party refineries in maintaining systemic integrity. By isolating these variables, we can better understand the specific missing links in the Indonesian ecosystem that must be addressed to achieve the same level of penetration seen in the Indian and Turkish markets.

The comparative analysis suggests that while India excels in the standardization of gold and Turkey in monetary integration, Indonesia's strength lies in its institutional accessibility. Unlike India and Turkey, which rely heavily on commercial banking sectors that often exclude the unbanked, Indonesia utilizes PT. Pegadaian as a bridge. This non-bank approach allows for a more direct impact on financial inclusion by catering to segments of society that possess physical gold but lack traditional bank accounts. By positioning Pegadaian at the forefront, the Indonesian model effectively transforms the company's 124

years of experience and its network of over 4,000 outlets into a localized inclusive gold bank that democratizes access for the lower-middle-class.

Table 3. Comparison of bullion business models

Feature	India (Monetization Model)	Turkey (Liquidity Model)	Indonesia (Inclusion Model)
Primary hub	Certified Refineries & Banks	Commercial & Central Banks	PT. Pegadaian (Non-Bank)
Inflow mechanism	Melting jewelry into bars/coins for interest-bearing certificates (Nargunam & Anuradha, 2017).	Reserve Digital gold deposit accounts with physical collecting days (Demir & Sesli, 2021)	Digital gold savings (<i>Tabungan Emas</i>) & physical collateral.
Financial instrument	Gold Monetization Scheme (GMS) & Sovereign Gold Bonds (Selvakumar, 2016).	Gold-backed liquidity for bank reserve requirements (ROM) (Yuzbaşıoğlu, 2025).	Gold-backed financing and Micro-Bullion accounts (Khairunisa & Syafii, 2025).
Economic impact	Reduces dependency on gold imports and saves foreign forex (Arora et al., 2024).	Increases the resilience of the national banking system (Ersoy, 2022).	Empowers the People's Economy by providing MSME capital (Susilowati et al., 2024).
Key advantage	High tax incentives for citizens (Arora et al., 2024).	High integration with the Central Bank monetary policy.	Pervasive reach via 4,000+ local Pegadaian branches.

This institutional unique selling proposition (USP) is further validated by the sheer scale of the idle gold market in Indonesia, which is estimated to reach 1,800 tons among the public, valued at approximately IDR 300 trillion. The introduction of Gold Working Capital Loans (*PMK Emas*) and Micro-Bullion accounts allows this dormant wealth to be re-circulated as productive financing for the 66 million MSMEs that form the backbone of the national economy. As of early 2025, the synergy between PT. Pegadaian and the OJK have already begun to shift gold from a passive under-the-pillow asset into a recorded financial instrument that contributes to the national balance sheet, providing a buffer for the Rupiah and reducing the need for costly foreign gold storage services.

Ultimately, the success of this inclusion-centric model is reflected in its projected macroeconomic dividends: a potential IDR 245 trillion increase in GDP and the creation of up to 1.8 million new jobs across the gold refining and financial service sectors. By leveraging its 5,000+ certified gold appraisers and its vast physical presence, PT. Pegadaian does more than just offer a service; it provides a secure, state-backed environment that converts cultural habits into a driver for economic sovereignty. This strategic evolution ensures that Indonesia not only captures the added value of its domestic gold production, currently ranked 10th globally, but also empowers its citizens to participate actively in a more resilient and transparent "People's Economy." To ensure these figures are interpreted within a rigorous framework, the following section delineates the economic modeling assumptions and the multiplier logic used to arrive at these projections.

The ambitious projections for Indonesia's bullion ecosystem are grounded in a dead capital mobilization framework. This research utilizes a multi-layered economic assumption model to bridge the gap between physical gold hoarding and national GDP growth. The logic follows that when dead capital (passive jewelry) is deposited into PT Pegadaian's bullion accounts, it is transformed into active capital. This gold serves as a High-Quality Liquid Asset (HQLA) that allows Pegadaian to issue low-interest credit to MSMEs. Because MSMEs in Indonesia have a high marginal propensity to consume and invest locally, the velocity of this gold-backed money is significantly higher than traditional stagnant deposits. Consequently, the 1.8 million projected jobs are not merely in gold banking but are the secondary result of increased capital liquidity for 66 million MSMEs, which can then expand operations and hire local labor.

Furthermore, the model assumes a fiscal revenue linkage. By shifting gold trading from the informal (grey) market to the formalized bullion ecosystem under POJK 17/2024, the state captures VAT and Income Tax that was previously lost. This "tax synchronization" provides the government with the fiscal space to reinvest in People's Economy programs, further compounding the initial economic impact.

3.2 Synthesis of financial inclusion: The gold ecosystem as a gateway for the unbanked

To synthesize the literature regarding the gold ecosystem as a catalyst for financial inclusion, the research identifies three core thematic pillars: access, usage, and impact. The following table summarizes the synthesis of theoretical and empirical literature (2015–2025) concerning the role of gold-based assets in bridging the gap for unbanked populations.

Table 4. Synthesis of literature: The gold ecosystem as a financial inclusion gateway

Analytical pillar	Key literature findings	Impact on the unbanked population
Asset familiarity and access	Gold is viewed as a "universal currency" with high cultural resonance, lowering psychological barriers to entering formal finance (World History Journal, 2024).	Provides a "safe-haven" entry point for individuals who distrust traditional paper-based banking products.
Gold as collateral (credit access)	Gold-backed financing provides immediate liquidity without the need for a complex credit history or physical bank branches (Markou et al., 2018).	Enables "unbankable" groups (MSMEs, rural poor) to access formal credit through institutions like Pegadaian.
Digital gold integration	FinTech innovations (e.g., gold savings) allow for micro-savings and real-time P2P payments based on gold value (Rachmad, 2025).	Reduces transaction costs and eliminates the "physical distance" barrier for rural communities.
Store of value (resilience)	Gold acts as an inflation hedge and a stable store of value compared to volatile local currencies (Binh, 2024).	Gold acts as an inflation hedge and a stable store of value compared to volatile local currencies.
Key advantage	Bullion service providers reduce information asymmetry by using physical gold as a verified asset class (Borjigin et al., 2025).	Simplifies the onboarding process for formal financial services, turning "idle gold" into active capital.

Based on the synthesis of the literature presented in Table 4, the following comprehensive explanation explores how the gold ecosystem serves as a strategic gateway for the unbanked, framed within the theories of financial inclusion and the concept of an inclusive economy. The synthesis of literature reveals that the bullion business, particularly as operationalized by PT. Pegadaian in Indonesia, is not merely a commercial expansion but a structural intervention in the national inclusive economy. To understand this, we must connect the empirical findings from Table 3 with core economic theories: Financial Intermediation Theory, Public Good Theory of Financial Inclusion, and Vulnerability-Stress-Adaptation (VSA) Theory.

The first dimension of this synthesis, asset familiarity and access, posits that the cultural resonance of gold acts as a psychological bridge for segments of the population that historically exhibit a deep-seated distrust of fiat-based banking institutions. By leveraging gold as a universal currency, PT. Pegadaian utilizes the Public Good Theory to provide a democratized entry point where wealth is not defined by complex paper documentation but by a tangible, trusted commodity. This transition converts under-the-pillow gold into a

formalized financial account, effectively lowering the barrier to entry for the 75% of Indonesians who are still reaching for full financial integration.

Furthermore, the pillar of gold as collateral directly addresses the credit rationing problem prevalent in emerging markets. According to Financial Intermediation Theory, the use of gold as a verified and highly liquid asset class allows bullion service providers to bypass the traditional need for extensive credit scoring or physical property certificates. For MSMEs and the rural poor, this means that immediate liquidity is no longer a privilege of the bankable elite, but an accessible right for any citizen holding physical assets. This democratization of credit shifts the power dynamic from institutional lenders to the asset-holding public, fostering a more equitable distribution of capital across the Indonesian archipelago.

Finally, the integration of FinTech through digital gold and the store of value pillar provides the ultimate adaptive mechanism for economic resilience. Under the Vulnerability-Stress-Adaptation (VSA) Theory, gold-based savings like gold saving function as a macroeconomic shock absorber that protects the purchasing power of low-income earners from the stressors of inflation and currency devaluation. By allowing for micro-savings in increments as small as 0.01 grams, the bullion ecosystem ensures that even the most vulnerable groups can participate in wealth accumulation. Consequently, the gold ecosystem transcends its role as a commodity market to become a permanent, technology-driven pillar of Indonesia People's Economy, ensuring long-term financial stability for the grassroots.

3.2.1 Breaking the psychological and cultural barrier: Asset familiarity

The first pillar of the synthesis is asset familiarity. It addresses one of the most significant hurdles in financial inclusion: the trust gap. Standard economic theory often assumes that the unbanked remain outside the system purely due to a lack of supply (i.e., no nearby bank branches). However, the Public Good Theory of Financial Inclusion suggests that inclusion is a social mandate that requires financial products to be accessible and resonant with the community's values (Kling et al., 2022).

For the Indonesian unbanked population, gold is not a new financial product; it is a culturally embedded store of value. Literature suggests that when gold is integrated into a formal ecosystem (like Pegadaian's bullion services), it acts as a psychological bridge. By converting physical jewelry into digital gold savings or collateralized financing, Pegadaian leverages the existing trust in gold to onboard marginalized segments who traditionally fear or distrust fiat-based banking institutions.

This cultural alignment effectively transforms the fear of the unknown into a sense of financial familiarity. While traditional bank accounts require a shift in mindset toward abstract numbers and intangible balances, a bullion-based account maintains a tangible link to a physical asset that the user already understands and values. This phenomenon minimizes the onboarding friction often found in microfinance initiatives, as the user does not perceive the transition to formal finance as a risk, but rather as a secure upgrade to their existing savings habits.

Furthermore, by utilizing gold as the primary vehicle for interaction, the bullion ecosystem addresses the dignity barrier often faced by low-income individuals in formal banking settings. In many traditional banking environments, small-scale savers may feel marginalized by high minimum balances or complex bureaucratic requirements. In contrast, the gold-based model which grounded in the Public Good Theory validates the existing wealth of the poor, regardless of how small the quantity. This shift in institutional approach fosters a deeper sense of economic belonging, ensuring that financial inclusion is not just a statistical achievement, but a sustainable social integration that empowers the People's Economy from the bottom up.

3.2.2 *Financial intermediation and the unbankable MSME*

The second pillar is Gold as Collateral. It is rooted in Financial Intermediation Theory. In a traditional banking setup, information asymmetry and high transaction costs often lead to credit rationing, where banks refuse to lend to those without a documented credit history or traditional land certificates as collateral (Gbadebo, 2024). Pegadaian's bullion business model disrupts this by using gold. A highly liquid, universally valued asset as the ultimate intermediary tool. For Micro, Small, and Medium Enterprises (MSMEs), access to gold-backed financing means they can secure capital without the stress of rigorous banking requirements. This asset-backed lending effectively democratizes credit, allowing the grassroots economy to grow without the prerequisites of a modern credit score. By transforming physical gold into active working capital, Pegadaian acts as a bridge intermediary that reduces the risk premium usually associated with lending to unbanked populations.

The implementation of the bullion model presents a transformative opportunity to unlock under-the-pillow Gold. Indonesia holds a massive reserve of informal household gold, estimated at over 1,800 tons. The bullion business allows Pegadaian to mobilize this dead capital into the formal financial system, creating a massive pool of domestic liquidity that can be redistributed as productive loans for the People's Economy. Furthermore, the synergy within the Ultra Micro (UMi) Holding (BRI, Pegadaian, and PNM) provides a unique opportunity to scale this model. With a combined network of thousands of outlets, the bullion ecosystem can reach the most remote regions, providing rural farmers and traders with the same wealth-building tools as urban elites

3.2.3 *Digitalization and the micro-unit economy*

The integration of FinTech within the gold ecosystem (digital gold) addresses the ontological aspect of accessibility. Theoretical reviews highlight that physical distance and minimum balance requirements are the primary enemies of inclusion. The digitalization of the bullion business allows for fractional ownership, where a street vendor can save as little as 0.01 grams of gold via a mobile app. This aligns with the Inclusive Economy concept, which argues that economic systems must provide a ladder for upward mobility (Titalessy & Situmeang, 2023). Digital gold allows the unbanked to participate in wealth accumulation and real-time P2P transactions, effectively providing them with the same investment tools as high-net-worth individuals, but scaled down to their daily cash flow.

The primary opportunity for PT. Pegadaian lies in its ability to bridge the digital-physical divide. While FinTech startups offer digital gold, Pegadaian provides a physical last-mile presence through its 4,000+ branches. This creates a hybrid ecosystem where digital savings can be seamlessly converted into physical collateral or used for Rahn (Sharia-compliant pawn) financing. Recent research highlights that this integration significantly improves access for rural and low-income areas, contributing to broader economic resilience and social inclusion (Sihotang et al., 2025). By utilizing Blockchain technology for immutable ownership records and Zero Trust Architecture for security, Pegadaian can build the institutional trust necessary to move the unbanked from informal hoarding into the formal digital economy.

3.2.4 *Building macro-resilience for the vulnerable*

Finally, the synthesis highlights gold as a Store of Value that fosters resilience. According to VSA Theory, marginalized populations are most vulnerable to external shocks like inflation or currency devaluation. Unlike cash, which loses purchasing power, gold historically appreciates during economic volatility. By encouraging the unbanked to store their wealth in the bullion ecosystem, Pegadaian is not just providing a service; it is creating a macro-economic shock absorber for the poor. When the People's Economy is backed by a stable asset like gold, the national economy becomes more resilient. The bullion business

thus transforms from a profit center into a strategic instrument for national economic stability, ensuring that growth is not just robust, but fundamentally inclusive (Supatmojo et al., 2024). The theoretical synthesis confirms that the gold ecosystem, led by Pegadaian strategic role, addresses the four dimensions of financial inclusion: accessibility, availability, usage, and quality. By bridging the gap between informal savings (physical gold) and formal financial services (bullion banking), Pegadaian fulfills its mandate as a catalyst for a more just and inclusive Indonesian economy.

3.3 Macroeconomic value proposition: Strengthening the People's Economy

The formalization of the bullion business in Indonesia, officially inaugurated by President Prabowo Subianto on February 26, 2025, serves as a significant macroeconomic catalyst designed to unlock the value of the nation's vast gold reserves. Quantitatively, the government projects that the bullion ecosystem will contribute an increase of IDR 245 trillion (approximately USD 15 billion) to Indonesia's Gross Domestic Product (GDP) by mobilizing idle gold currently estimated at 1,800 tons held outside formal financial systems. This initiative is expected to generate 1.8 million new jobs across the gold value chain, spanning from domestic refining and standardized vaulting to decentralized trading services. From a fiscal perspective, the bullion model is projected to attract investments totaling IDR 47.4 trillion and stimulate a total money circulation of IDR 156 trillion.

Beyond direct growth, the quantitative impact extends to monetary stability and the balance of payments. By providing domestic infrastructure that meets international standards (e.g., LBMA-certified refineries), Indonesia can significantly reduce its historical dependency on foreign trading hubs like Singapore, thereby saving foreign exchange reserves and strengthening the Rupiah through enhanced domestic gold liquidity. As of October 2025, PT. Pegadaian alone managed a gold balance of 129 tons, while Bank Syariah Indonesia (BSI) managed 19.77 tons, demonstrating a rapid absorption of public assets into the formal economy (Kemenko Perekonomian, 2025). These figures underscore the role of the bullion business not just as a financial service, but as a strategic pillar for achieving an 8% annual economic growth target and ensuring national financial resilience against global market volatility.

3.3.1 Constructing the macroeconomic value proposition

The construction of a macroeconomic value proposition for the bullion business in Indonesia necessitates a deep analytical shift from viewing gold as a static luxury to recognizing it as a dynamic engine for formalization. The study identifies this scheme as a formalization engine that systematically bridges the disconnect between the household sector, which currently holds an estimated 1,800 to 2,600 tons of informal gold and the formal financial architecture. This structural bridge facilitates a three-tier value proposition that addresses the core systemic inefficiencies of the Indonesian economy.

First, through Capital Mobilization, the scheme effectively addresses the dead capital phenomenon popularized by Hernando de Soto. By integrating idle gold into the formal banking system via PT Pegadaian, the bullion business converts dormant private wealth into productive liquidity. This mobilization is critical for the grassroots level, as it re-injects capital into the economy as low-risk working capital for MSMEs, thereby reducing the national credit gap. Deep analysis suggests that this does not merely increase the volume of money but improves the velocity of capital, as gold-backed assets circulate more efficiently than hoarded physical ornaments (Askandar et al., 2025).

Second, the scheme provides a robust mechanism for Monetary Stability by localizing the gold value chain. Currently, Indonesia suffers from capital flight in the form of service payments to offshore bullion hubs like Singapore and Dubai for refining and storage. By establishing domestic bullion banks, Indonesia can retain this economic surplus, effectively reducing the outflow of foreign exchange (Forex). This localization creates a liquidity buffer for the Central Bank, as domestic gold reserves provide an alternative to fiat-based reserves,

thereby stabilizing the Rupiah against global inflationary pressures and US Dollar fluctuations (Supatmojo et al., 2024).

Finally, the Fiscal Contribution of the bullion business represents a significant leap in national revenue transparency (Takenaga, 2016). The formalization of gold trades through regulated entities like PT. Pegadaian creates a documented tax base that was previously invisible to the state. Analytical projections indicate that this formalization could contribute up to IDR 245 trillion to the national GDP by 2025 through a combination of increased money circulation, job creation in the refining sector, and value-added processing. Consequently, the bullion business transforms from a simple financial service into a strategic instrument of Economic Sovereignty, ensuring that the nation's mineral wealth is utilized to strengthen the People's Economy rather than remaining trapped in the informal sector.

3.3.2 Strengthening the People's Economy

The implementation of the bullion business scheme at PT. Pegadaian is analytically framed as a strategic vehicle for democratizing wealth within the Indonesian grassroots. By aligning with the deep-seated socio-cultural habit of gold ownership, the ecosystem effectively bypasses traditional banking barriers, such as prohibitively high minimum balances and complex documentation, that have historically marginalized the unbanked. The integration of FinTech through digital gold savings serves as a crucial ontological entry point for financial inclusion, allowing for a micro-unit economy where individuals can accumulate assets in fractions as small as 0.01 grams. According to the Vulnerability-Stress-Adaptation (VSA) Theory, this model functions as a vital macroeconomic shield; by encouraging low-income earners to store wealth in a stable, inflation-hedging asset like gold, Pegadaian provides a shock absorber against the currency devaluation and price volatility that typically devastate the purchasing power of the poor (Ross et al., 2022).

Furthermore, the bullion ecosystem facilitates a revolutionary Democratization of Credit by establishing gold as a universal intermediary for the 66 million MSMEs that anchor the Indonesian economy. Analytical results indicate that gold-backed financing effectively eliminates credit rationing, the systemic refusal of banks to lend to those without traditional land certificates or credit histories (Mushaddik, 2025). Under the POJK 17/2024 framework, MSMEs can now leverage their gold savings as high-quality collateral to secure low-interest capital for productive activities. As of late 2025, PT. Pegadaian's strategic commitment to this People's Economy is evidenced by its management of 129 tons of gold assets, effectively shifting economic power from institutional lenders back to the asset-holding public. This transformation ensures that financial growth is not merely a top-down phenomenon but is fundamentally inclusive, fostering long-term upward mobility and economic sovereignty for the marginalized.

3.3.3 Challenges to inclusive implementation

Despite the compelling macroeconomic value proposition, the study identifies critical stress points that could undermine the strength of the People's Economy if left unaddressed. The foremost obstacle is the Literacy-Trust Gap, where transitioning the grassroots population from traditional physical hoarding to formalized bullion accounts requires an immense degree of institutional trust (Banerjee et al., 2020). Marginalized populations are analytically found to be wary of unallocated or digital assets that lack an immediate physical presence, fearing that their wealth exists only as an entry in a ledger.

Furthermore, Fiscal Barriers present a structural threat; if high Value Added Tax (VAT) or income tax burdens are imposed on gold transactions, the unbanked are likely to retreat into the unregulated informal market, effectively neutralizing the inclusion efforts of POJK 17/2024. To ensure a truly inclusive economy, the study suggests a shift toward fiscal neutrality or specific tax exemptions for small-scale gold savers. Finally, the inherent price volatility of gold remains a significant risk. While gold is a long-term hedge, short-term

market fluctuations can be devastating for micro-investors with limited cash flow. Consequently, the study identifies an urgent need for micro-hedging mechanisms within the Pegadaian scheme to safeguard the capital of the poor against sudden market downturns.

The study concludes that the bullion business scheme is a critical macroeconomic driver and a structural cornerstone for a modern People's Economy. By successfully integrating PT. Pegadaian's vast network of over 4,000 branches with the rigorous legal framework of POJK 17/2024, Indonesia is uniquely positioned to shift its economic model from one based on vulnerable consumption to one anchored in stable assets. This transition leverages the nation's profound cultural affinity for gold to create a resilient, self-sustaining, and inclusive financial ecosystem. Ultimately, the bullion scheme fulfills the mandate of the UUP2SK Law by providing the unbanked with a sophisticated yet accessible ladder for upward mobility, ensuring that Indonesia's mineral wealth translates into tangible prosperity for the grassroots.

4. Conclusions

The implementation of a formal bullion business scheme via POJK No. 17 of 2024 and PT. Pegadaian marks a strategic shift from consumption-based growth to a resilient, asset-backed economic framework. By formalizing "dead capital" from informal gold reserves, Indonesia is successfully transforming household hoarding into productive liquidity. This ecosystem is projected to contribute up to IDR 245 trillion to the national GDP, localizing a high-value chain that strengthens foreign exchange reserves and positions gold as a cornerstone of national economic sovereignty and the Golden Indonesia 2045 vision.

On a microeconomic level, this model democratizes finance by aligning modern fintech with the cultural affinity for gold, providing the unbanked with a ladder for upward mobility. Through digital fractional ownership and gold-backed credit, the scheme acts as a strategic shock absorber against inflation for marginalized populations and MSMEs. While future research should empirically measure shifts in "under-the-pillow" gold behavior and long-term environmental impacts, the current bullion framework effectively bridges the gap in financial inclusion, ensuring Indonesia's mineral wealth serves as a dynamic instrument for a more just and inclusive future.

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Author Contribution

Conceptualization, N.M and N.B; Methodology, N.M and N.B Formal Analysis, N.M and N.B; Resources, N.M and N.B Data Curation, N.M and N.B; Writing – Original Draft Preparation, N.M and N.B.; Writing – Review & Editing, N.M and N.B.; Visualization, N.M and N.B. All authors have read and agreed to the published version of the manuscript.

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Data Availability Statement

The data supporting the findings of this study are available within the article and its accompanying tables (Tables 1–4). No new primary datasets were generated during this study, as the research utilizes a systematic literature review methodology. All analyzed data were sourced from publicly archived repositories, academic databases (Scopus, ScienceDirect, Google Scholar), and official regulatory documents from the Financial Services Authority (OJK) and Bank Indonesia. Any further inquiries regarding the qualitative synthesis process may be directed to the corresponding author.

Conflicts of Interest

The authors declare no conflict of interest. The authors have no personal circumstances or financial interests that could be perceived as inappropriately influencing the representation or interpretation of the reported research results. Furthermore, the funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

Declaration of Generative AI Use

During the preparation of this work, the authors used Gemini to assist in improving grammar, clarity, and academic tone. After using this tool, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

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