

Sovereign Bond Stabilization, Rupiah Volatility, and Portfolio Investment Resilience in Indonesia

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Abstract

This study examines how sovereign bond stabilization, rupiah volatility, and portfolio investment resilience are interconnected in Indonesia as an emerging financial market. Using a Systematic Literature Review guided by the PRISMA framework, this study synthesizes 25 eligible academic publications from Crossref, Scopus, and Google Scholar published between 2020 and 2024. Recent 2026 policy and market developments are used only as contextual evidence, not as part of the reviewed academic corpus. The synthesis shows three main findings. First, sovereign bond yield dynamics are shaped by macroeconomic fundamentals, fiscal credibility, exchange-rate expectations, liquidity, geopolitical risk, political uncertainty, investor structure, and policy credibility. Second, rupiah depreciation can increase currency losses for foreign investors, raise required yields, reduce bond prices, and intensify portfolio outflow pressure. Third, credible bond-market stabilization, coordinated monetary–fiscal policy, stronger domestic institutional participation, and diversified sovereign financing instruments can support portfolio resilience by reducing excessive yield volatility and strengthening investor confidence. This study contributes to the literature by integrating sovereign bond-market stability, exchange-rate risk, and portfolio resilience into a unified conceptual framework for Indonesia. The findings offer practical implications for policymakers, institutional investors, and portfolio managers seeking to manage fixed-income risk under global financial uncertainty.

Keywords : Sovereign bond stabilization; Rupiah volatility; Portfolio investment resilience; Emerging financial markets; Bond market stability; Monetary–fiscal policy coordination.

A. INTRODUCTION

International financial markets have become increasingly interconnected, making emerging economies more exposed to global monetary tightening, geopolitical shocks, capital-flow reversals, exchange-rate volatility, and changes in global investor risk appetite. In this environment, sovereign bond markets play a strategic role because they transmit macroeconomic expectations into asset prices, government financing costs, and portfolio allocation decisions. Sovereign bonds are not merely public debt instruments; they also function as benchmarks for domestic interest rates, indicators of fiscal credibility, and key assets in institutional portfolios. Therefore, instability in sovereign bond markets may affect not only government borrowing costs but also the resilience of investment portfolios, especially in emerging markets where foreign investor participation and exchange-rate risk remain important.

Modern Portfolio Theory provides the grand theoretical foundation for understanding this issue. Markowitz's portfolio theory explains that investors allocate assets by balancing expected return and risk, while diversification is expected to reduce unsystematic risk (Markowitz, 1952). However, in emerging financial markets, portfolio diversification may not fully protect investors from systematic risks such as exchange-rate depreciation, inflationary pressure, global interest-rate shocks, liquidity constraints, and capital-flow reversals. International portfolio theory extends this logic by emphasizing that cross-border investors face both asset-price risk and currency risk. In the Indonesian context, this means that rupiah-

denominated sovereign bonds may offer attractive yields, but foreign investors remain exposed to currency translation losses when the rupiah weakens. Consequently, rupiah volatility can reduce total portfolio returns, increase required bond yields, and encourage portfolio reallocation away from domestic assets.

The literature published between 2020 and 2024 has provided important insights into sovereign bond yield dynamics, macroprudential policy, political uncertainty, geopolitical risk, market liquidity, and portfolio optimization. Recent studies show that sovereign bond yields are influenced by macroeconomic fundamentals, fiscal credibility, inflation expectations, monetary policy, legal protection, political uncertainty, geopolitical shocks, and market liquidity (Aizenman, Joshua et al., (2023); Burriel et al., (2024); Wet, 2023; Handler & Jankowitsch, (2025); B.M, Lithin et al., 2023; Saiegh, Sebastian M; Biglaiser, (2024). Other studies also emphasize that institutional investor behavior, ownership structure, and market microstructure can influence bond-price fragility and liquidity conditions (Handler & Jankowitsch, (2025); Kerssenfischer & Helmus, (2024). In Indonesia, portfolio optimization research also indicates that diversification across stocks, government bonds, the U.S. dollar, gold, and Bitcoin can improve risk-return performance (Semeru, I.M.G Abandi; Nainggolan, 2023). These studies confirm that sovereign bond markets and portfolio investment decisions are strongly affected by both macroeconomic and market-structure factors.

Nevertheless, the existing literature still leaves a clear research gap. Most previous studies examine sovereign bond yield volatility, exchange-rate risk, macroprudential policy, or portfolio optimization as separate research streams. Studies on sovereign bond yields generally focus on macroeconomic determinants or uncertainty factors, while studies on portfolio optimization tend to emphasize asset allocation and risk-return performance. Meanwhile, policy-related studies often discuss stabilization mechanisms without directly linking them to portfolio resilience. As a result, limited research has systematically integrated sovereign bond stabilization, rupiah volatility, and portfolio investment resilience within a single conceptual framework for Indonesia. This gap is important because these three issues are not independent. Rupiah depreciation can increase currency losses for foreign investors, raise required sovereign bond yields, reduce bond prices, and trigger portfolio outflows. At the same time, sovereign bond-market instability can intensify exchange-rate pressure and weaken investor confidence.

Indonesia provides a relevant case for examining this relationship because its sovereign bond market is closely connected to fiscal financing, monetary stability, exchange-rate expectations, and investment portfolio behavior. Indonesian government bonds are widely used by banks, insurance companies, pension funds, mutual funds, and foreign investors. Therefore, sharp movements in government bond yields may affect institutional portfolio performance and broader financial-market stability. When sovereign yields rise sharply, bond prices decline, portfolio values weaken, and investors may rebalance toward safer or more liquid assets. If this process is accompanied by rupiah depreciation, foreign investors may face simultaneous bond-price losses and currency losses. This mechanism shows that portfolio investment resilience in Indonesia cannot be explained only by diversification; it must also consider exchange-rate stability, bond-market liquidity, investor confidence, and policy credibility.

The 2026 Indonesian policy context further strengthens the practical relevance of this study. However, this context is separated from the 2020–2024 academic literature review period and is used only as current policy background. In April 2026, Bank Indonesia stated that it continued to optimize its policy mix to maintain rupiah stability amid heightened global uncertainty, including offshore intervention through non-deliverable forwards, onshore intervention through the spot market and domestic non-deliverable forwards, and secondary-market purchases of government securities. Bank Indonesia also reported foreign exchange reserves of USD148.3 billion at the end of March 2026, equivalent to 5.8 months of imports and government external debt servicing, which it considered adequate to support external resilience (Bank Indonesia, 2026). This policy background indicates that exchange-rate stabilization and sovereign bond-market stability are institutionally connected in Indonesia's macro-financial policy framework.

The investment dimension also reinforces the urgency of this issue. Indonesia's investment realization in the first quarter of 2026 reached Rp498.79 trillion, exceeding the government target of Rp497 trillion, with year-on-year growth of 7.22 percent and labor absorption of 706,569 workers. Foreign direct

investment reached Rp249.94 trillion, while investment distribution was relatively balanced between Java and outside Java. These figures indicate that Indonesia remains attractive to investors, but investment resilience depends on whether the financial system can withstand currency pressure, sovereign bond yield volatility, and global risk shocks. If bond-market volatility increases and rupiah depreciation persists, investor confidence may weaken even when domestic investment realization remains strong. Therefore, maintaining sovereign bond stability is not only a debt-management issue but also part of Indonesia's broader investment-resilience strategy.

The government's policy discussion on the reactivation of a Bond Stabilization Fund and the exploration of Panda Bonds also shows the relevance of this study. In May 2026, Indonesia's Minister of Finance announced plans to reactivate a Bond Stabilization Fund to support the sovereign bond market by buying back government securities sold by investors in the secondary market. The stated objective was to maintain stable government bond yields and reduce the risk of capital losses for foreign investors (ANTARA News, 2026). At the same time, Indonesia explored yuan-denominated Panda Bonds as a financing diversification strategy to seek potentially lower yields, broaden funding sources, and reduce reliance on the U.S. dollar (ANTARA News, 2026). These developments illustrate that stabilization policy and financing diversification may become complementary instruments for strengthening market confidence, reducing concentration risk, and supporting portfolio resilience. However, such instruments also require transparent governance, credible fiscal management, and effective coordination with monetary policy.

Based on this background, this study aims to systematically review and synthesize recent academic literature on sovereign bond-market stability, exchange-rate volatility, stabilization policy, and portfolio investment resilience, with particular attention to Indonesia's investment context. The study addresses three research questions. RQ1: What determinants of sovereign bond yield dynamics are most frequently identified in recent literature? RQ2: How can stabilization policies and financing diversification instruments influence investor confidence and portfolio resilience? RQ3: What conceptual framework can explain the relationship among sovereign bond stabilization, rupiah volatility, and portfolio investment resilience in Indonesia?

The contribution of this study is threefold. First, it synthesizes academic literature from 2020 to 2024 on sovereign bond yield dynamics, macroeconomic risk, market liquidity, investor behaviour, and portfolio strategy. Second, it contextualizes the findings within Indonesia's 2026 policy environment without mixing policy news sources into the formal SLR corpus. Third, it proposes an integrated conceptual framework linking rupiah volatility, sovereign bond stabilization, investor confidence, and portfolio investment resilience. This contribution is expected to support policymakers, institutional investors, and portfolio managers in designing more resilient investment strategies under global financial uncertainty.

Preliminary Literature Review

The state of the art in sovereign bond research shows that government bond markets are influenced by macroeconomic fundamentals, fiscal credibility, monetary policy, exchange-rate expectations, market liquidity, investor structure, and external shocks. Earlier studies mainly emphasized fiscal deficits, debt-to-GDP ratios, inflation, and interest-rate expectations as determinants of sovereign bond yields. More recent studies have expanded this view by incorporating non-linear volatility, geopolitical risk, political uncertainty, legal jurisdiction, market microstructure, and institutional investor behaviour. This development is important for emerging markets such as Indonesia because sovereign bonds are highly exposed to global risk appetite, foreign capital flows, and exchange-rate volatility. In Indonesia, sovereign bonds are not only government financing instruments but also important assets in investment portfolios. Therefore, portfolio investment resilience depends not only on asset diversification but also on sovereign bond stability and rupiah movement. This study uses Modern Portfolio Theory as the grand theory, supported by Sovereign Risk Theory, Macroeconomic Fundamentals Theory, International Finance Theory, Market Microstructure Theory, and Institutional Investor Theory.

a. Modern Portfolio Theory as the Grand Theory

Modern Portfolio Theory is used as the grand theory because the main focus of this study is portfolio investment resilience. This theory explains that investors form portfolios by balancing expected

return and risk. Diversification can reduce unsystematic risk, but it cannot fully eliminate systematic risks such as exchange-rate volatility, interest-rate shocks, inflation, and global financial uncertainty.

In the Indonesian context, government bonds are generally considered defensive assets because they provide fixed income and are backed by the state. However, their stabilizing role may weaken when rupiah volatility, foreign capital outflows, and rising sovereign bond yields increase market risk. Semeru, I.M.G Abandi; Nainggolan, (2023) show that Indonesian portfolio performance can be improved through diversification across LQ45 stocks, government bonds, the U.S. dollar, gold, and Bitcoin. However, portfolio resilience cannot rely only on diversification because bond prices may still decline when currency pressure and global uncertainty increase. Therefore, Modern Portfolio Theory provides the main foundation for explaining how sovereign bond stabilization and exchange-rate management can strengthen portfolio investment resilience in Indonesia. This theory is also supported by Giannetti, (2024), who show that investor ownership structure can affect bond price fragility and fire-sale risk. This means that portfolio performance is influenced not only by asset allocation but also by market liquidity and investor behaviour.

b. Sovereign Risk Theory and Macroeconomic Fundamentals Theory

Sovereign Risk Theory explains that sovereign bond prices and yields reflect investor perceptions of a government's ability and credibility in managing debt. These perceptions are shaped by fiscal sustainability, inflation, monetary credibility, political stability, legal certainty, and external vulnerability. In this study, Sovereign Risk Theory is used to explain why sovereign bond stabilization is important for maintaining investor confidence and reducing excessive yield volatility.

Macroeconomic Fundamentals Theory complements this view by emphasizing the role of inflation, interest rates, exchange rates, fiscal balance, economic growth, and public debt in determining bond yields. In normal conditions, investors usually evaluate sovereign bonds based on these macroeconomic indicators. However, during crisis periods, liquidity pressure, capital outflows, and market sentiment may become more dominant.

Several studies support this argument. B.M, Lithin et al., 2023 show that sovereign bond yield volatility in India is asymmetric, meaning that market responses differ between positive and negative shocks. Adom-dankwa et al., (2024) also find asymmetric relationships between sovereign bond yields and macro-financial determinants in frontier economies. Hariparsad & Mar, (2024) show that emerging-market yield curves experience stronger non-parallel shifts because of political and economic risks. Meanwhile, Aizenman, Joshua et al., (2023) demonstrate that macroprudential policies influence ASEAN-4 sovereign bond markets, and Burriel et al., (2024) find that macroeconomic fundamentals explain sovereign spreads better in normal periods than in crisis periods. These findings are relevant for Indonesia because rupiah volatility can increase sovereign risk. Foreign investors holding rupiah-denominated bonds face both bond-price risk and currency risk. When the rupiah depreciates, foreign investors may demand higher yields or reduce their exposure to Indonesian government bonds. As a result, sovereign bond stabilization must be supported by credible fiscal policy, prudent debt management, and coordinated monetary policy.

c. International Finance Theory, Market Microstructure Theory, and Institutional Investor Theory

International Finance Theory explains how exchange rates, global interest rates, balance of payments, and cross-border capital flows affect domestic financial markets. This theory is relevant because rupiah volatility is an important transmission channel between global uncertainty and Indonesia's sovereign bond market. When the rupiah weakens, foreign investors may experience currency losses, which can reduce demand for Indonesian government bonds and increase yields.

This argument is supported by De Wet, (2023), who shows that geopolitical risk affects sovereign bond yields across different maturities, and Handler & Jankowitsch, (2025), who find that political uncertainty affects bond prices, liquidity, and issuance costs. These findings suggest that exchange-rate stability, policy credibility, and investor confidence are essential for maintaining sovereign bond resilience.

Market Microstructure Theory explains that bond-market stability also depends on liquidity, trading mechanisms, dealer behaviour, and market infrastructure. Kerssenfischer & Helmus, (2024) show that disruptions in sovereign bond markets can reduce liquidity and cause prices to deviate from fundamental values. This means that even when macroeconomic fundamentals are sound, weak market liquidity can still create bond-market instability.

Institutional Investor Theory explains the role of banks, mutual funds, pension funds, insurance companies, and other institutional investors in stabilizing or destabilizing bond markets. Cortes, Gustavo S; Cunha, Igor; Haque, (2024) show that banking relationships can support bond financing stability, while Huynh (2024) finds that banks in Vietnam hold more sovereign bonds under competitive pressure. These findings imply that domestic institutional investors can strengthen sovereign bond resilience, especially when foreign investors reduce exposure. In addition, studies on alternative bond instruments show that bond markets can support broader investment resilience. Yu, (2024) finds that green bonds can improve investment and financing capacity, while Song, Yang; Medda, (2022) and (Song et al., 2024) show that resilience bonds can support infrastructure financing and risk reduction. Although these studies do not focus directly on Indonesia, they show that bond instruments can be designed to strengthen financial resilience.

In summary, this study integrates several theories to explain the relationship among sovereign bond stabilization, rupiah volatility, and portfolio investment resilience. Modern Portfolio Theory explains diversification and portfolio resilience. Sovereign Risk Theory and Macroeconomic Fundamentals Theory explain bond-yield movements. International Finance Theory explains exchange-rate and capital-flow effects. Market Microstructure Theory and Institutional Investor Theory explain the role of liquidity, trading systems, and investor behaviour. This integrated theoretical framework becomes the main novelty of the study in analysing Indonesia's investment resilience.

B. RESEARCH METHODS

1. Research Design

This study applies a Systematic Literature Review design to examine the relationship among sovereign bond stabilization, rupiah volatility, and portfolio investment resilience in Indonesia. The SLR approach is appropriate because the topic combines several streams of research, including sovereign bond yield dynamics, exchange-rate volatility, macroprudential policy, portfolio optimization, foreign investor behavior, and bond-market stabilization mechanisms. Instead of testing primary numerical data directly, this study synthesizes existing empirical and conceptual findings to build an integrated understanding of how Indonesia can strengthen investment resilience under global financial uncertainty.

The review procedure follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses, or PRISMA, to ensure that the identification, screening, eligibility assessment, and inclusion process are transparent and replicable (Page et al., 2021). PRISMA is used in this study because the reviewed literature comes from different but related financial contexts, including emerging-market sovereign bonds, ASEAN macroprudential policy, portfolio optimization, bond-market liquidity, investor behavior, and alternative bond instruments

2. Data Sources and Literature Search Strategy

The academic literature search was conducted using Crossref, Scopus, and Google Scholar. The publication period was limited to 2020–2024 to capture recent developments after the COVID-19 crisis, global inflation shock, monetary tightening cycle, and renewed concerns about emerging-market capital flows. Classical theoretical references, such as Markowitz (1952) and Sharpe (1964), were used only to support the theoretical foundation. Meanwhile, 2026 policy and market sources were used only as contextual evidence and were not counted as part of the 25 reviewed academic studies.

The search strategy used Boolean keyword combinations related to the main research variables. The search strings included: “sovereign bond” AND “yield volatility”; “sovereign bond” AND “exchange rate”; “government bond” AND “portfolio investment”; “bond market stabilization” AND “emerging market”; “rupiah volatility” AND “government bond”; “macroprudential policy” AND “sovereign bond market”; “portfolio resilience” AND “bond market”; “capital flows” AND “sovereign bond yields”; “green bond” OR “resilience bond” AND “investment financing”; and “Indonesia” AND “portfolio optimization” AND “government bond.” These keywords were applied to titles, abstracts, and keywords where database filters were available.

3. Inclusion and Exclusion Criteria

The inclusion criteria were established to ensure relevance, recency, and methodological clarity. A publication was included if it met four criteria. First, it was published between 2020 and 2024, except for

classical theoretical references used outside the SLR corpus. Second, it discussed at least one of the following topics: sovereign bonds, government bond yields, exchange-rate volatility, macroprudential policy, portfolio investment, capital flows, bond-market stabilization, green bonds, resilience bonds, or investment financing. Third, it used a clear research method, such as regression analysis, GARCH, NARDL, GMM, quantile regression, simulation, case study, thick modelling, or systematic conceptual analysis. Fourth, it was published in an academic journal, indexed conference proceeding, working paper series, or recognized institutional research publication.

Publications were excluded if they were popular articles without clear methodology, did not relate to investment or financial-market analysis, discussed bonds only from a legal perspective without investment relevance, lacked accessible full text, or duplicated another version of the same study. News articles and policy reports from 2026 were excluded from the PRISMA count and used only to explain Indonesia's current policy relevance.

4. PRISMA-Based Literature Selection Procedure

The initial database search identified 350 records from Crossref, Scopus, and Google Scholar. Before screening, 150 records were removed because they were duplicates, outside the publication period, not academic in nature, or clearly irrelevant based on database metadata. As a result, 200 records proceeded to title and abstract screening. At this stage, 100 records were excluded because they did not focus on sovereign bonds, exchange rates, portfolio investment, bond-market stabilization, or financial resilience. Therefore, 100 reports were sought for full-text retrieval. Of these, 20 reports could not be accessed, leaving 80 full-text reports for eligibility assessment. During full-text assessment, 55 reports were excluded because they lacked methodological clarity, had weak relevance to the research questions, focused only on non-financial legal aspects, or did not provide sufficient findings for synthesis. Finally, 25 academic studies were included in the systematic review.

This corrected PRISMA flow is mathematically consistent: 350 identified records minus 150 removed records produced 200 screened records; 200 screened records minus 100 excluded records produced 100 reports sought for retrieval; 100 reports minus 20 unavailable reports produced 80 assessed reports; and 80 assessed reports minus 55 excluded reports produced 25 final studies.

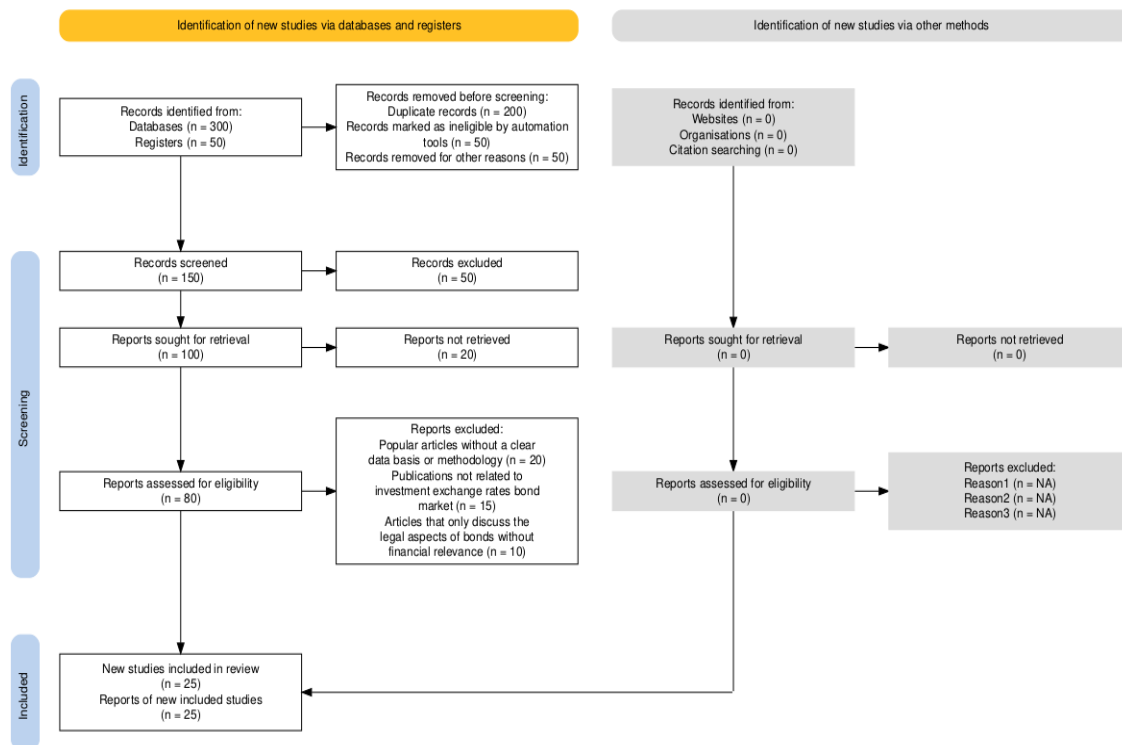


Figure 1. Results of the Three-Phase Research Methodology Based on the PRISMA Flow Diagram

5. Quality Appraisal

A quality appraisal procedure was added to strengthen the transparency of the review. Each eligible article was assessed using five criteria: relevance to the research questions, clarity of research method, credibility of data source or publication outlet, clarity of findings, and contribution to understanding sovereign bond stabilization, rupiah volatility, or portfolio resilience. Each criterion was scored from 0 to 2, producing a maximum score of 10. Studies scoring 6 or above were retained in the final synthesis. Studies below this threshold were excluded unless they provided unique theoretical or contextual insight that was directly relevant to the research objective. This appraisal ensured that the final review was not based only on keyword matching but also on academic quality and substantive relevance.

6. Data Extraction and Analysis Technique

Data extraction was conducted using a structured review matrix. Each selected article was coded based on author, year, publication source, DOI or link, research title, theoretical foundation, variables, measurement indicators, method of analysis, main findings, and relevance to this study. The extracted data were then analyzed using thematic synthesis. The studies were grouped into six themes: sovereign bond yield dynamics, macroeconomic and exchange-rate risk, stabilization policy, portfolio optimization, investor behavior, and alternative bond instruments. The synthesis compared patterns, differences, and gaps across the selected studies to develop an integrated conceptual framework for Indonesia's portfolio investment resilience.

C. RESULTS AND DISCUSSION

1. Results

The results of this Systematic Literature Review are derived from 25 selected academic studies that examine sovereign bonds, exchange-rate risk, macroprudential policy, portfolio optimization, investor behavior, bond-market liquidity, alternative bond instruments, and financial resilience. The synthesis shows that the reviewed articles do not form a single homogeneous body of literature. Instead, they can be grouped into three major patterns: studies emphasizing macroeconomic and sovereign-risk determinants of bond yields; studies emphasizing market liquidity, investor structure, and institutional behaviour; and studies emphasizing portfolio diversification and alternative bond instruments.

The first pattern shows strong agreement that sovereign bond yield dynamics are shaped by macroeconomic fundamentals, but the strength of these fundamentals varies across market conditions. Studies by B.M, Lithin et al., (2023), Wet, (2023), Adom-dankwa et al., (2024), Handler & Jankowitsch, (2025), and Burriel et al., (2024) indicate that sovereign bond yields respond to inflation, interest rates, fiscal credibility, liquidity conditions, and macro-financial risk. However, the findings also show that bond-yield responses are often asymmetric and regime-dependent. In normal periods, macroeconomic fundamentals may explain sovereign spreads relatively well, but during crisis periods, liquidity pressure, investor sentiment, and global risk aversion become more dominant. This pattern is highly relevant for Indonesia because rupiah depreciation may generate stronger negative market reactions than positive macroeconomic news of similar size.

The second pattern concerns uncertainty and market structure. De Wet, (2023) shows that geopolitical risk affects sovereign bond yields across maturities, while Handler & Jankowitsch, (2025), demonstrate that political uncertainty reduces bond prices and liquidity before major events. Giannetti, (2024) add that ownership concentration in mutual funds can create bond price fragility and fire-sale spillovers. Kerßenfischer & Helmus, (2024) further show that disruptions in sovereign bond markets can reduce liquidity and cause transaction prices to deviate from fundamental values. These findings reveal that sovereign bond stability depends not only on macroeconomic fundamentals but also on investor structure, market liquidity, and trading infrastructure.

The third pattern relates to portfolio resilience and financing diversification. Semeru, I.M.G Abandi; Nainggolan, (2023) show that Indonesian portfolio performance can be improved through diversification across the LQ45 stock index, government bonds, the U.S. dollar, gold, and Bitcoin. However, diversification does not fully eliminate systematic risk arising from currency depreciation, interest-rate shocks, and foreign investor outflows. Studies on green bonds and resilience bonds show that

bond instruments can also support investment resilience by reducing financing constraints, broadening funding sources, and supporting long-term risk mitigation . Song, Yang; Medda, (2022); Song et al., (2024); Yu, (2024). These findings suggest that sovereign bond stabilization and financing diversification are complementary rather than substitutive strategies.

Across the 25 selected studies, the main difference lies in analytical focus. Some studies explain bond-yield movements through macroeconomic variables, while others emphasize institutional investors, market microstructure, political risk, or alternative financing instruments. The main gap is that few studies directly integrate exchange-rate volatility, sovereign bond stabilization, and portfolio resilience in a single emerging-market framework. In particular, the Indonesian case remains under-synthesized. Existing studies provide useful evidence on portfolio optimization, ASEAN macroprudential policy, and sovereign bond volatility, but they do not fully explain how rupiah volatility can transmit pressure to sovereign bond yields and portfolio outflows, or how stabilization policy can reduce this transmission.

Table 1. Research Findings

N o.	Researcher, Journal & DOI	Year,	Research Title	Theory	Variables	Measurement Indicators	Method of Analysis	Main Findings	Relevance to SLR
1	Chen, 2023, <i>BCP & Business Management</i> , Vol. 40		Research on the Investment Value of Bond Analysis Based on Linear Regression Model	Investment valuation theory	Bond value, investment return	Bond price, return, risk indicators	Linear regression	Bond valuation can be estimated using statistical modeling to support investment decisions.	Supports the use of quantitative bond analysis in investment decision-making.
2	Asonuma & Joo, 2024, Working Paper		Sovereign Defaults and Public Investment Capital	Sovereign debt theory	Sovereign default, public investment	Default risk, public capital, fiscal capacity	Theoretical and empirical analysis	Sovereign default risk affects public investment and long-term fiscal sustainability.	Relevant to sovereign risk and government bond credibility in emerging markets.
3	Hao, 2023, Proceedings of ICFTBA, 10.54254/2754-1169/65/20231588	DOI:	An Empirical Study on the Impact of Convertible Bond Financing on Corporate Performance	Capital structure theory	Convertible bond financing, corporate performance	Financing scale, profitability, corporate indicators	Empirical regression	Convertible bond financing influences corporate performance and financing flexibility.	Provides insight into bond-based financing and investment performance.
4	Semeru & Nainggolan, 2023, <i>IJCSRR</i> , DOI: 10.47191/ijcsrr/V6-i7-108		Investment Portfolio Optimization in Indonesia	Modern portfolio theory	Portfolio assets, return, risk	LQ45, government bonds, USD, gold, Bitcoin	Portfolio optimization	Diversified assets improve portfolio risk-return performance in Indonesia.	Directly supports the portfolio resilience focus of this SLR.

5	Lithin et al., 2023, <i>Cogent Economics & Finance</i> , DOI: 10.1080/23322039.2023.2189589	Modelling Asymmetric Sovereign Bond Yield Volatility with Univariate GARCH Models	Volatility theory	Sovereign bond yield volatility	Yield changes, asymmetric volatility	Univariate GARCH models	Sovereign bond yields show asymmetric volatility under different market conditions.	Supports analysis of bond-yield volatility under market uncertainty.
6	Aizenman et al., 2023, ADB Economics Working Paper No. 696	Effect of Macprudential Policies on Sovereign Bond Markets	Macprudential policy theory	Macprudential policy, sovereign bond market	Bond yields, policy instruments, ASEAN-4 indicators	Panel econometric analysis	Macprudential policies influence sovereign bond-market outcomes in ASEAN countries.	Highly relevant to Indonesia as part of ASEAN-4 financial markets.
7	Cortes, Cunha, & Haque, 2024, Working Paper	From Arm's Length to Arm in Arm: Banks and Municipal Bond Financing	Relationship banking theory	Bank relationships, municipal bonds	Bond holdings, issuance conditions, bank portfolios	Causal empirical analysis	Banking relationships improve bond financing conditions and market stability.	Explains how financial institutions can stabilize bond markets.
8	Greco, Pintus, & Raggi, 2025, Working Paper	When Fiscal Discipline Meets Macroeconomic Stability: The Euro-Stability Bond	Fiscal federalism and debt mutualization theory	Euro-stability bond, debt, macroeconomic stability	Public debt, forecast uncertainty, macro indicators	Structural model and GVAR	Stability bonds may reduce macroeconomic uncertainty without weakening fiscal discipline.	Provides comparative insight for bond stabilization mechanisms.
9	De Wet, 2024, <i>Journal of Risk and Financial Management</i>	Geopolitical Risks and Yield Dynamics in the Australian Sovereign Bond Market	Geopolitical risk theory	Geopolitical risk, sovereign bond yields	Short-, medium-, and long-term yields	Quantile regression	Geopolitical risk affects sovereign yields asymmetrically across maturities.	Supports the role of external shocks in bond-yield dynamics.
10	Cumming & Monteiro, 2022, Working Paper	Sovereign Wealth Fund Investment in Venture Capital, Private Equity, and Real Asset Funds	Institutional investment theory	Sovereign wealth funds, alternative assets	VC, private equity, real assets	Empirical institutional analysis	Sovereign wealth funds diversify into alternative assets to improve long-term returns.	Relevant to portfolio diversification and sovereign investment strategy.
11	Giannetti & Jotikasthira, 2023, <i>Review of Financial Studies</i>	Bond Price Fragility and the Structure of the Mutual	Market fragility theory	Mutual fund ownership, bond prices	Fund flows, bond ownership, fire-sale risk	Empirical analysis	Ownership concentration affects bond price fragility	Explains how investor structure affects

		Fund Industry					and fire-sale spillovers.	bond-market resilience.
12	Tumuhirwe et al., 2024, <i>IJFMR</i> , Vol. 6 Issue 2	Bond Market Development and Infrastructure Development Index	Financial development theory	Bond-market development, infrastructure development	Portfolio bond investment, infrastructure index	Dynamic panel GMM	Bond-market development positively supports infrastructure development.	Links bond investment with development financing and resilience.
13	Saiegh & Biglaiser, 2024, <i>Journal of Empirical Legal Studies</i> , DOI: 10.1111/jels.12384	The Value of Legal Recourse in Sovereign Bond Markets	Legal protection and sovereign risk theory	Governing law, bond prices	Foreign-law premium, bond prices, investor holding	Twin-bond empirical analysis	Foreign-law bonds trade at higher prices due to stronger investor protection.	Shows that legal credibility affects sovereign bond pricing and investor confidence.
14	Adom-Dankwa et al., 2024, <i>Heliyon</i> , DOI: 10.1016/j.heliyon.2024.e37995	Assessing the Asymmetric Interrelationships Between Sovereign Bond Yields and Selected Potential Determinants	Asymmetric adjustment theory	Sovereign yields, macro-financial determinants	Liquidity, financial stability, risk indicators	NARDL model	Sovereign bond yields respond asymmetrically to macro-financial variables.	Supports non-linear analysis of bond yield behavior.
15	Hariparsad & Maré, 2024, <i>Journal of Risk and Financial Management</i> , DOI: 10.3390/jrfm17110510	Optimal Monetary and Fiscal Policies to Maximise Non-Parallel Risk Premia in Sovereign Bond Markets	Yield-curve risk premium theory	Monetary policy, fiscal policy, risk premia	Yield-curve slope, curvature, butterfly strategy return	Backtesting and policy regime analysis	Emerging markets show higher non-parallel yield shifts due to economic and political risk.	Relevant to fixed-income portfolio strategy under policy uncertainty.
16	Handler & Jankowitsch, 2024, <i>Financial Markets and Portfolio Management</i> , DOI: 10.1007/s11408-024-00461-6	Political Uncertainty and Sovereign Bond Markets	Political uncertainty theory	Political uncertainty, bond prices, liquidity	EPU index, prices, liquidity, issuance costs	Event study	Political uncertainty reduces bond prices and liquidity before major events.	Explains the importance of political stability for bond-market resilience.

17	Burriel et al., 2024, Banco de España Working Paper, DOI: 10.53479/36257	Estimating the Contribution of Macroeconomic Factors to Sovereign Bond Spreads in the Euro Area	Macroeconomic fundamentals theory	Sovereign spreads, macroeconomic factors	10-year spreads, macro-financial indicators	Thick modeling framework	Macroeconomic fundamentals explain spreads in normal times but less during crises.	Supports the need for crisis-sensitive bond stabilization policies.
18	Huynh, 2024, <i>Asian Academy of Management Journal of Accounting and Finance</i>	Sovereign Bond Holdings Under Bank Competition in Vietnam	Bank competition theory	Bank competition, sovereign bond holdings	Bank-level data, treasury securities, competition proxies	System GMM	Banks hold more sovereign bonds under competitive pressure for strategic motives.	Relevant to domestic institutional demand for sovereign bonds.
19	European bank structured finance study, 2020–2024	Bank Choice Between Structured Finance Bonds and Straight Bonds	Asymmetric information theory	Structured bonds, straight bonds, bank capital	Capital ratios, maturity, securitization, covered bonds	Deal-level empirical analysis	Banks use structured finance bonds to manage credit risk and regulatory capital.	Shows how bond design affects financial institutions and market stability.
20	Yu, 2024, <i>Highlights in Business, Economics and Management</i>	Green Bond Issuance and Corporate Investment and Financing Level	Sustainable finance theory	Green bonds, investment, financing level	Financing constraints, maturity mismatch, market sentiment	Panel-data analysis	Green bonds improve investment and financing capability by reducing constraints.	Relevant to alternative bond instruments and sustainable investment resilience.
21	Runkel, 2022, <i>Journal of Financial Crises</i> , DOI: 10.17132/2693-3179.1368	Thailand: Bond Stabilization Fund	Crisis intervention theory	Bond stabilization fund, market liquidity	Corporate debt rollover, liquidity stress, policy restrictions	Case study	Thailand's BSF was designed to calm debt markets, although restrictive conditions limited use.	Provides comparative evidence for Indonesia's possible bond stabilization mechanism.
22	Kerssenfischer & Helmus, 2024, ECB Working Paper No. 2944	Outages in Sovereign Bond Markets	Market microstructure theory	Market outages, liquidity, transaction prices	Trading activity, liquidity, price deviation	Natural experiment	Market outages reduce liquidity and cause price	Shows that liquidity infrastructure is crucial

							deviations from fundamentals.	for sovereign bond stability.
23	Song & Medda, 2024, Working Paper	Financing Supply Chain Resilience Via Resilience Bond	Resilience finance theory	Resilience bond, supply chain infrastructure	Bond value, infrastructure resilience, catastrophe risk	Case study and valuation model	Resilience bonds can unlock private finance for resilient infrastructure.	Expands bond-market discussion into resilience-based investment financing.
24	Zhang, 2023, <i>Financial Engineering and Risk Management</i> , DOI: 10.23977/ferm.2023.061002	Bond Financing, Information Disclosure Quality and Corporate Investment Efficiency	Agency theory and information disclosure theory	Bond financing, disclosure quality, investment efficiency	Underinvestment, overinvestment, disclosure quality	Mediation effect model	Information disclosure strengthens the governance role of bond financing.	Supports the role of transparency in bond-market credibility.
25	Song, Medda, & Wang, 2024, <i>Journal of Sustainable Finance & Investment</i> , DOI: 10.1080/20430795.2024.2366200	The Value of Resilience Bond in Financing Flood Resilient Infrastructures	Resilience bond valuation theory	Resilience bond, infrastructure financing, flood risk	Bond pricing, resilience value, sensitivity indicators	Simulation and sensitivity analysis	Resilience bonds extend investment resources and reduce disaster-related financial risk.	Relevant to investment resilience and alternative fixed-income instruments.

2. Discussion

Rupiah volatility directly affects sovereign bond yields through currency-risk and investor-confidence channels. Depreciation reduces the foreign-currency return of rupiah-denominated bonds, prompting investors to demand higher yields or reduce exposure (De Wet, (2023); B.M, Lithin et al., (2023)). This leads to lower bond prices and potential portfolio losses, creating a negative feedback loop between currency depreciation and bond-market volatility (Hariparsad & Mar, 2024).

Modern Portfolio Theory explains why diversification alone cannot mitigate these systemic risks (Markowitz, 1952). Even with diversified portfolios, government bonds in Indonesia remain exposed to exchange-rate shocks, global interest-rate volatility, and capital-flow reversals (Semeru, I.M.G Abandi; Nainggolan, (2023)). Portfolio managers should consider duration, liquidity, currency, and policy risks when allocating to rupiah-denominated government bonds.

Sovereign Risk Theory suggests that bond yields reflect fiscal credibility, monetary credibility, and macroeconomic stability (Burriel et al., (2024); Aizenman, Joshua et al., (2023)). Credible stabilization policies enhance investor confidence, while inconsistent interventions may fail to reduce risk premiums. Market Microstructure Theory further emphasizes the role of liquidity, trading infrastructure, and dealer participation in maintaining bond-market stability (Kerssenfischer & Helmus, (2024)). In Indonesia, secondary-market interventions and a well-designed Bond Stabilization Fund can help provide liquidity and prevent disorderly price declines, but effectiveness requires transparency and coordination with monetary and fiscal authorities Runkel, (2022).

Domestic institutional investors can act as stabilizers when foreign investors withdraw (Cortes, Gustavo S; Cunha, Igor; Haque, (2024); Huynh, (2024)). Banks, pension funds, and the central argument of this study is that rupiah volatility affects portfolio investment resilience through the sovereign bond market.

When the rupiah depreciates, foreign investors holding rupiah-denominated government bonds experience currency translation losses. Even when bond coupons remain attractive, currency losses can reduce total returns. As a result, investors may demand higher yields, shorten duration exposure, sell government securities, or shift to foreign-currency assets. This behaviour can lower bond prices, increase sovereign yields, and create additional pressure on the rupiah through portfolio outflows. Therefore, rupiah volatility and sovereign bond yields may reinforce each other during periods of global uncertainty.

Modern Portfolio Theory explains why diversification is important, but the reviewed evidence shows that diversification alone is insufficient in an emerging-market context. Indonesian government bonds may serve as defensive assets in normal periods, but they remain exposed to systematic risks such as exchange-rate volatility, global interest-rate shocks, liquidity pressure, and investor risk aversion. This finding extends Semeru, I.M.G Abandi; Nainggolan, (2023), who emphasize portfolio diversification in Indonesia, by showing that the resilience of diversified portfolios also depends on sovereign bond stability and currency-risk management.

Sovereign Risk Theory provides a second explanation. Government bond yields reflect investor perceptions of fiscal sustainability, monetary credibility, inflation risk, liquidity risk, and political uncertainty. When rupiah volatility increases, investors may interpret currency pressure as a signal of external vulnerability. This perception can raise the risk premium demanded on Indonesian government securities. The evidence from B.M, Lithin et al., (2023), Adom-dankwa et al., (2024), and Burriel et al., (2024) supports this argument because bond-yield reactions are often asymmetric and more sensitive during periods of stress. Therefore, credible fiscal policy, inflation control, reserve adequacy, and transparent debt management are essential to reduce excessive sovereign-risk perception.

Market Microstructure Theory further explains why stabilization policy is necessary. Even when macroeconomic fundamentals remain relatively sound, bond prices can deviate from fundamental values if liquidity disappears or investors sell simultaneously. This is consistent with Giannetti, (2024) and Kerssenfischer & Helmus, (2024), who show that investor structure and market functioning affect bond-price fragility. In Indonesia, this means that secondary-market liquidity, dealer capacity, central bank operations, and domestic institutional investor participation are important components of portfolio resilience.

The role of a Bond Stabilization Fund should therefore be interpreted as a liquidity and confidence mechanism. Its purpose is not to eliminate market risk, but to prevent disorderly yield spikes, reduce panic selling, and signal that authorities are committed to maintaining market functioning. The experience of Thailand's Bond Stabilization Fund provides a useful lesson: stabilization instruments must be credible, transparent, and usable, but they must also avoid moral hazard Runkel, (2022). For Indonesia, this implies that a stabilization fund should have clear intervention triggers, transparent governance, coordination with Bank Indonesia, and communication that distinguishes temporary liquidity support from permanent yield control.

Financing diversification also supports resilience, but it does not remove risk completely. Instruments such as Panda Bonds may broaden the investor base and reduce reliance on U.S. dollar funding, while green bonds and resilience bonds show how fixed-income instruments can be designed for long-term development and risk mitigation. However, diversified financing may introduce new currency, legal, and investor-base risks. Therefore, financing diversification should be combined with currency-risk management, transparent issuance strategy, and credible debt governance.

Overall, the synthesis shows that Indonesia's portfolio investment resilience requires an integrated framework. Rupiah stability reduces currency-related losses and foreign investor risk aversion. Sovereign bond stabilization reduces excessive yield volatility and protects fixed-income portfolio values. Domestic institutional investors strengthen market absorption capacity when foreign investors reduce exposure. Financing diversification broadens funding sources and reduces concentration risk. These elements are mutually reinforcing and should be managed as part of a single investment-resilience strategy.

D. CONCLUSION

This study concludes that sovereign bond stabilization, rupiah volatility, and portfolio investment resilience are strongly interconnected in Indonesia. The reviewed literature shows that sovereign bond yields are influenced by macroeconomic fundamentals, exchange-rate expectations, liquidity conditions, political uncertainty, investor structure, and policy credibility. Rupiah depreciation may increase sovereign bond yields because foreign investors face currency losses and demand higher risk premiums. This mechanism can reduce bond prices, weaken fixed-income portfolios, and increase capital-flow pressure.

The study answers the research questions by showing that the main determinants of sovereign bond yield dynamics include inflation, interest rates, fiscal credibility, exchange-rate volatility, liquidity, geopolitical risk, and investor behavior. Stabilization policies and financing diversification can support investor confidence when they are transparent, credible, and coordinated with monetary and fiscal policy. The proposed conceptual framework links rupiah volatility, sovereign bond stabilization, domestic institutional participation, financing diversification, and portfolio resilience.

The main contribution of this study is the integration of Modern Portfolio Theory, Sovereign Risk Theory, International Finance Theory, Market Microstructure Theory, and Institutional Investor Theory into a unified framework for understanding Indonesia's investment resilience. The study also clarifies the distinction between the 2020–2024 academic literature review period and the 2026 policy context. Its limitation is that it relies on secondary literature and does not conduct direct econometric testing using Indonesian time-series data. Future research should test the framework empirically using GARCH, NARDL, quantile regression, or portfolio simulation models.

REFERENCES

Academic Sources

- Adom-dankwa, A., Atsu, F., & Numapau, E. (2024). Heliyon Assessing the asymmetric interrelationships between sovereign bond yields and selected potential determinants : The case of frontier WAMZ economies. *Heliyon*, 10(19), e37995. <https://doi.org/10.1016/j.heliyon.2024.e37995>
- Aizenman, Joshua et al. (2023). EFFECT OF MACROPRUDENTIAL POLICIES ON SOVEREIGN BOND MARKETS ADB ECONOMICS WORKING PAPER SERIES Effect of Macprudential Policies on Sovereign Bond Markets : Evidence from the ASEAN-4 Countries. *ADB Economics Working Paper Series Effect*, 696.
- Asonuma, T., & Joo, H. (2024). Sovereign Defaults and Public Investment (Capital). *International Monetary Fund, Publication Services*, 1–83.
- B.M, Lithin et al. (2023). Modelling asymmetric sovereign bond yield volatility with univariate GARCH models: Evidence from India. *Cogent Economics & Finance*, March. <https://doi.org/10.1080/23322039.2023.2189589>
- Burriel, P., Delgado-téllez, M., Figueroa, C., Kataryniuk, I., & Pérez, J. J. (2024). Estimating the contribution of macroeconomic factors to sovereign bond spreads in the euro area. Documentos de Trabajo N.º 2408. *Working Paper*, 1–30.
- Chen, H. (2023). Research on the Investment Value of Bond Analysis based on Linear Regression Model. *BCP Business & Management*, 40, 191–195.
- Cortes, Gustavo S; Cunha, Igor; Haque, S. (2024). From Arm ' s Length to Arm in Arm : Banks and Municipal Bond Financing. *Working Paper*.
- Cumming, D., & Monteiro, P. (2022). Sovereign Wealth Fund Investment in Venture Capital, Private Equity, and Real Asset Funds. *Center for Financial Studies Working Paper Series*, 700.
- Giannetti, M. (2024). Bond Price Fragility and the Structure of the Mutual Fund Industry. *The Review OfFinancial Studies Oxford University Press.*, 37, 2063–2109.
- Handler, L., & Jankowitsch, R. (2025). Political uncertainty and sovereign bond markets. In *Financial Markets and Portfolio Management* (Vol. 39, Issue 1). Springer Berlin Heidelberg. <https://doi.org/10.1007/s11408-024-00461-6>
- Hao, S. (2023). An Empirical Study on the Impact of Convertible Bond Financing on Corporate

- Performance. *Proceedings of the 2nd International Conference on Financial Technology and Business Analysis*, 0, 75–84. <https://doi.org/10.54254/2754-1169/65/20231588>
- Hariparsad, S., & Mar, E. (2024). Optimal Monetary and Fiscal Policies to Maximise Non-Parallel Risk Premia in Sovereign Bond Markets. *Journal of Risk and Financial Management*, 17(2024), 1–33.
- Huynh, J. (2024). SOVEREIGN BOND HOLDINGS UNDER BANK COMPETITION IN VIETNAM. *Asian Academy of Management Journal of Accounting and Finance*, 20(2), 181–209.
- Kerssenfischer, M., & Helmus, C. (2024). Working Paper Series Outages in sovereign bond markets. *Working Paper European Central Bank*, 2944.
- Pinto, João; Dos Santos, M. C. (2024). Banks ' Structured Bond Financing : Evidence from the European Market *. I(2), 91–122.
- Pintus, F. J., Greco, L., & Raggi, D. (2023). Luciano Greco Davide Raggi When Fiscal Discipline Meets Macroeconomic Stability : The Euro-Stability. *Working Paper*, 11.
- Runkel, C. N. (2022). Thailand : Bond Stabilization Fund. *Journal of Financial Crises Volume*, 4(2), 1720–1731.
- Saiegh, Sebastian M; Biglaiser, G. (2024). The value of legal recourse in sovereign bond markets : Evidence from Argentina. *Journal Of Empirical Legal Studies*, 21, 669–709. <https://doi.org/10.1111/jels.12384>
- Semeru, I.M.G Abandi; Nainggolan, Y. A. (2023). International Journal of Current Science Research and Review Investment Portfolio Optimization in Indonesia (Study On : Lq-45 Stock Index , Government Bond , United States Dollar , Gold and Bitcoin). *International Journal of Current Science Research and Review*, 06(07), 4922–4934. <https://doi.org/10.47191/ijcsrr/V6-i7-108>
- Song, Yang; Medda, F. (2022). Financing Supply Chain Resilience Via Resilience Bond : A Case Study of a Supply Network in China. *SSRN Electronic Journal*.
- Song, Y., Medda, F., & Wang, M. (2024). The value of resilience bond in financing flood resilient infrastructures : a case study of Towyn. *Journal of Sustainable Finance & Investment ISSN:*, 14(4), 889–912. <https://doi.org/10.1080/20430795.2024.2366200>
- Tumuhirwe, T. B., Nzibonera, E., Mugarura, J. T., & Kiwala, Y. (2024). Bond Market Development and Infrastructure Development Index : An Analysis of African Countries with the Portfolio Investment Bonds. *International Journal for Multidisciplinary Research (IJFMR)*, 6(2), 1–16.
- Wet, M. C. De. (2023). Geopolitical Risks and Yield Dynamics in the Australian Sovereign Bond Market. *Journal of Risk and Financial Management*.
- Yu, W. (2024). Green Bond Issuance and Corporate Investment and Financing Level : Evidence from Chinese Listed Companies. *Highlights in Business, Economics and Management*, 32, 122–143.
- Zhang, M. (2023). Bond Financing , Information Disclosure Quality and Corporate Investment Efficiency. *Financial Engineering and Risk Management*, 6, 14–23. <https://doi.org/10.23977/ferm.2023.061002>

Policy and Market Context Sources

- ANTARA News. (2026, May 7). *Indonesia to revive bond stabilization fund to defend weak rupiah*. <https://en.antaranews.com/news/414848/indonesia-to-revive-bond-stabilization-fund-to-defend-weak-rupiah>
- ANTARA News. (2026, May 11). *RI seeks for more attractive Panda Bonds compared to Dim Sum Bonds*. <https://en.antaranews.com/news/415403/ri-seeks-for-more-attractive-panda-bonds-compared-to-dim-sum-bonds>
- Bank Indonesia. (2026, April 16). *Bank Indonesia continues to maintain rupiah exchange rate stability amid global volatility*. https://www.bi.go.id/en/publikasi/ruang-media/news-release/Pages/sp_287526.aspx
- CNBC Indonesia. (2026, May 6). *Video: Kurangi candu dolar AS, RI terbitkan Panda Bond di China*. <https://www.cnbcindonesia.com/mymoney/20260506132345-74-732721/video-kurangi-candu-dolar-as-ri-terbitkan-panda-bond-di-china>
- Infobanknews. (2026, May 8). *Pandangan analis soal rencana pendanaan Bond Stabilization Fund*. <https://www.infobanknews.com/pandangan-analis-soal-rencana-pendanaan-bond-stabilization-fund>

- Kompas.com. (2026, May 9). *Perkuat nilai tukar rupiah, BI intervensi pasar domestik dan internasional*.
<https://money.kompas.com/read/2026/05/09/123000526/perkuat-nilai-tukar-rupiah-bi-intervensi-pasar-domestik-dan-internasional>
- Kompas.com. (2026, May 9). *Rosan beberkan PR investasi Indonesia demi kejar target ekonomi 8 persen*.
<https://money.kompas.com/read/2026/05/09/122318926/rosan-beberkan-pr-investasi-indonesia-demi-kejar-target-ekonomi-8-persen>