

Fiscal Risk Management of Indonesia's Tax Incentive Regime Under Global Minimum Tax: Evidence from BKPM LKPM Investment Data 2010–2026

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Abstract

This study examines the fiscal risk implications of Indonesia's tax incentive regime under the OECD/G20 Pillar Two global minimum tax (GMT) framework. Indonesia's Minister of Finance Regulation No. 136 of 2024 (PMK 136/2024), effective 1 January 2025, establishes the GloBE framework including QDMTT, IIR, and UTPR, while Director General of Taxes Regulation PER-06/PJ/2026 (May 2026) governs GMT technical compliance. Using qualitative doctrinal-policy analysis combined with quantitative examination of BKPM LKPM investment realisation microdata spanning 2010 to Q1 2026 — encompassing over 700,000 records from 66 quarterly datasets — this study identifies that Indonesia's traditional profit-based incentives generate material fiscal risk under Pillar Two, as incentives reducing the effective tax rate below 15% now trigger top-up tax liabilities rather than investment benefits. Plant-level evidence from 224 foreign-owned plants confirms that Indonesia's incentives are allocated indiscriminately with respect to investor motive. The study proposes a three-phase fiscal risk mitigation framework centred on Qualified Refundable Tax Credits structured as input R&D tax credits aligned with Substance-Based Income Exclusion mechanics and GloBE compatibility requirements.

Keywords: *fiscal risk management, global minimum tax, GloBE, tax incentives, QRTC, Indonesia, FDI, Pillar Two*

INTRODUCTION

Tax incentives have long served as strategic instruments through which developing countries attract foreign direct investment (FDI), stimulate industrialisation, generate employment, and facilitate technology transfer. Indonesia has historically depended on tax holidays, tax allowances, customs exemptions, and sectoral incentives to compete for FDI within the ASEAN region (OECD, 2020). Cross-country evidence from G20 economies confirms that Indonesia ranks second globally in the integral scale of investment-targeted tax expenditure application, with investment-related tax expenditures representing 10.65% of total tax revenues in 2021 — the highest share among nine G20 countries studied (Demidova et al., 2024).

The implementation of Pillar Two introduces material fiscal risk to Indonesia's incentive architecture. Under Pillar Two, MNE groups with annual consolidated revenue exceeding EUR 750 million face a minimum effective tax rate (ETR) of 15% (OECD, 2022). Incentives that reduce Indonesia's ETR below this threshold now generate top-up tax liabilities collectible under Indonesia's QDMTT or by other jurisdictions — transforming what was previously a fiscal sacrifice with investment benefit into pure revenue cost without incentive effectiveness. This represents a fundamental fiscal risk management challenge: existing incentive expenditures of approximately IDR 400.1 trillion in 2024 (Ministry of Finance, 2025) face the risk of generating neither revenue nor investment returns.

Indonesia's legislative response has been phased: PP 45/2019 introduced super deductions for R&D (300%) and vocational training (200%); PMK 136/2024 (effective 1 January 2025) established the GloBE framework; and PER-06/PJ/2026 (May 2026) provided detailed

technical implementation procedures. GMT top-up taxes apply from the 2025 tax year with first payments due December 2026. Despite these reforms, plant-level survey evidence from 224 foreign-owned plants in Indonesia reveals that tax incentives are allocated more-or-less randomly with respect to investor motive — amplifying the deadweight fiscal risk of the current incentive regime (Wren et al., 2026).

This study addresses the following research questions: (1) What is the fiscal risk exposure of Indonesia's current tax incentive regime under the Pillar Two GMT framework? (2) How does Indonesia's FDI trajectory relate to its tax incentive policy changes over 2010–2026? (3) What fiscal risk mitigation framework should Indonesia adopt to maintain investment competitiveness while achieving GloBE compliance? The study contributes to the literature by integrating primary BKPM LKPM investment microdata with Pillar Two mechanics, fiscal sustainability analysis, and institutional reform requirements.

LITERATURE REVIEW

Neoclassical investment theory establishes that tax incentives stimulate investment by reducing the user cost of capital and increasing after-tax returns (OECD, 2001). Tax competition theory further posits that countries deploy incentives to attract geographically mobile capital. However, empirical evidence regarding incentive effectiveness in Indonesia has been consistently mixed, and the fiscal risk dimensions of incentive regimes have received increasing attention in the post-BEPS literature.

Siregar and Patunru (2021) found that tax incentives alone do not reliably increase FDI inflows into Indonesia, emphasising the primacy of legal certainty, infrastructure quality, and governance. Wren et al. (2026), in the most direct primary evidence available, surveyed 224 foreign-owned plants in Indonesia and found that incentives are allocated indiscriminately with respect to investor motive — including labour resource-seeking investors who rate incentives as unimportant. This indiscriminate allocation creates deadweight fiscal risk: revenue sacrificed without incremental investment benefit. Demidova et al. (2024) confirmed in panel data analysis of 28 countries that Indonesia's investment increase coefficient ($C_i = 1.05$ in 2021) barely exceeded the effectiveness threshold, with targeted investment expenditures showing only weak correlation with capital investment volumes ($R^2 = 0.33$).

On the Pillar Two dimension, UNCTAD (2022) argued that traditional tax holidays become substantially less effective because low ETRs trigger top-up taxation. Saragih (2023), from within DGT's International Taxation Directorate, explicitly identified all three major Indonesian incentive categories as Pillar Two-affected and proposed input R&D tax credits structured as Qualified Refundable Tax Credits (QRTC) as the optimal GloBE-compatible instrument. Sidiq and Supriyadi (2025) confirmed through practitioner interviews with DGT, DJSEF, and tax consultants that QRTC implementation faces four institutional challenges: communication, resources, disposition, and bureaucratic structure — applying George C. Edward III's public policy implementation framework.

The institutional dimension of fiscal risk management has been theorised by Nguyen et al. (2017), who found across 28 Asia Pacific economies that all five World Bank Governance Indicator dimensions significantly reduce fiscal inefficiency. This finding is directly applicable to Indonesia's incentive governance challenge: fragmented administration across DGT, BKPM, Customs, and SEZ authorities generates operational risk in the QDMTT compliance context. Irwanto and Meilani (2022) provided comparative evidence that Indonesia's 300% R&D super deduction, though nominally more generous than Malaysia's 200% deduction and the US's 100% deduction, remains severely underutilised due to the absence of clear eligibility criteria — a regulatory risk confirmed empirically by Sari et al. (2024). Cahyadini et al. (2025) and

Riani and Rusydiana (2022) collectively identified that Indonesian tax incentive scholarship has remained fragmented, with limited literature specifically integrating fiscal risk management perspectives with the post-PMK 136/2024 and PER-06/PJ/2026 implementation environment that this study addresses.

METHODS

Research Design

This study employs a mixed-methods approach combining qualitative doctrinal-policy analysis with quantitative examination of primary investment microdata. The qualitative component involves systematic review of Indonesian tax legislation (PP 45/2019, PMK 136/2024, PER-06/PJ/2026) and OECD GloBE Model Rules. The quantitative component involves analysis of BKPM LKPM investment realisation microdata. The research design is consistent with policy analysis methodology as applied in tax policy research (Cahyadini et al., 2025; Saragih, 2023).

Data Sources

The primary quantitative data source is BKPM's Satu Data Kementerian Investasi dan Hilirisasi portal, comprising 66 quarterly investment realisation datasets from Q1 2010 to Q1 2026. The complete dataset encompasses over 700,000 individual investment project records covering investor status (PMA/PMDN), investor country of origin, sector, province, and investment value in both IDR million and USD thousand. Full-year 2024 data was confirmed by combining Q1 2024 (uploaded separately) with Q2–Q4 2024 data, producing a total of IDR 900.21 trillion (USD 60.01 billion) — validated against BKPM's official press release figure of IDR 900.2 trillion, providing strong internal validation. Secondary data sources include Indonesia's Tax Expenditure Report 2024 (Ministry of Finance, 2025), OECD GloBE administrative guidance, and academic literature comprising 26 confirmed references.

Data Analysis

The BKPM LKPM dataset was processed using Python (pandas library). Each quarterly CSV file was cleaned to remove formatting inconsistencies, standardised for separator characters (comma vs semicolon) and decimal notation (Indonesian comma-based vs dot-based), and aggregated by year, investor status, investor country, and sector. Annual PMA (foreign investment) totals were computed in both USD billion and IDR trillion. Top five investor countries were identified by annual USD investment value. The qualitative analysis applies Demidova et al.'s (2024) multidimensional average method for cross-country tax expenditure comparison, George C. Edward III's public policy implementation framework (as applied by Sidiq & Supriyadi, 2025) for institutional risk assessment, and Saragih's (2023) QRTC-SBIE ETR calculation framework for GloBE mechanics analysis.

RESULTS AND DISCUSSION

Fiscal Risk Exposure of Indonesia's Tax Incentive Regime

Indonesia's traditional incentive regime encompasses more than 90 schemes — including tax holidays under PMK 130/2020 (up to 100% CIT reduction for 20 years), tax allowances under PMK 96/2020, VAT facilities, customs exemptions, and SEZ incentives (DDTC, 2024/2025). Table I presents the evolution of Indonesia's incentive regime and the fiscal risk profile of each category under Pillar Two.

Table 1*Evolution of Indonesia's Tax Incentive Regime and GMT Fiscal Risk Profile*

Period	Main Incentives	Characteristics	GMT / Fiscal Risk
Pre-2018	Tax Holiday (PMK 130/2020), Tax Allowance (PMK 96/2020)	Profit-based; broad eligibility	High — directly reduces ETR below 15%; triggers QDMTT top-up tax under Pillar Two
2019 onwards	PP 45/2019 Super Deduction (R&D 300%, Vocational 200%)	Expenditure-based; not QRTC-structured	Medium — reduces taxable income; ETR exposure for Pillar Two-scoped MNEs
2025 onwards	PMK 136/2024: GloBE framework (QDMTT, IIR, UTPR)	Pillar Two adaptation	Structural — changes fiscal risk calculus for all in-scope MNE groups
2026 onwards	PER-06/PJ/2026: GMT technical implementation	Administrative GloBE compliance	High compliance risk — GIR filing obligations; DGT audit powers; new GloBE procedures
Future direction	QRTC; volume-based input R&D tax credits; SBIE-aligned	Substance-based; GloBE-compatible	Low fiscal risk — designed for GloBE compatibility (Saragih, 2023)

Note. Adapted from OECD (2024), DDTC (2024/2025), Government of Indonesia regulations, Saragih (2023), and Sidiq & Supriyadi (2025).

Saragih (2023), writing from DGT's International Taxation Directorate, identified all three major categories as Pillar Two-affected. The technical mechanism is: when an Indonesian MNE's ETR falls below 15% due to a tax holiday or tax allowance, Indonesia's QDMTT collects a top-up tax equivalent to the difference — converting what was previously a fiscal incentive into a retained revenue flow for Indonesia but without investment benefit for the investor. This represents a fundamental fiscal risk for existing incentive architecture: incentive expenditures of approximately IDR 400.1 trillion in 2024 face the risk of generating neither revenue nor investment returns for in-scope MNE groups (Ministry of Finance, 2025).

The QRTC emerges as the fiscally optimal alternative. Saragih's (2023) ETR calculation demonstrates: for an MNE with GloBE income EUR 1,000, CIT rate 10%, tangible assets EUR 200, and payroll EUR 100, an R&D tax credit of EUR 150 structured as QRTC produces an adjusted GloBE income of EUR 1,150 and ETR of 22.24% — above 15%, generating zero top-up tax. By contrast, a non-qualified refundable tax credit (NQRTC) of the same value produces ETR of 10% and triggers a 5% top-up tax liability (Sidiq & Supriyadi, 2025). Table 3 maps the complete fiscal risk profile of all major incentive types.

FDI Trends and the Fiscal Risk-Investment Relationship

BKPM LKPM data spanning 2010 to Q1 2026 — encompassing over 700,000 investment records from 66 quarterly datasets — provides comprehensive primary evidence on Indonesia's FDI trajectory and its relationship with tax incentive policy and fiscal risk management. Table 2 presents the complete annual PMA series with top investor countries.

Table 2*Indonesia PMA (FDI) Realization 2010–Q1 2026: BKPM LKPM Basis*

Year	PMA (USD Bn)	PMA (IDR Tn)	Top Investor Countries (BKPM)	Key Policy / Economic Context
2010	16.21	148.14	Singapore, BVI, USA, Japan, Malaysia	Baseline; traditional incentive regime dominant
2011	19.47	175.27	Singapore, Japan, USA, Netherlands, Malaysia	Commodity boom; steady FDI growth
2012	24.56	221.08	Singapore, Japan, South Korea, USA, Malaysia	Manufacturing FDI surge
2013	28.62	270.45	Singapore, Japan, USA, South Korea, China	Pre-reform peak; broad profit incentives dominant
2014	28.53	307.02	Singapore, Japan, Malaysia, Netherlands, USA	Jokowi era regulatory reform begins
2015	36.65	458.11	Singapore, Malaysia, Japan, Netherlands, USA	FDI surge; commodity sector reclassification
2016	28.96	396.64	Singapore, Japan, China, Hong Kong, Netherlands	Moderation; commodity pressure; tax amnesty
2017	32.24	430.46	Singapore, Japan, China, Hong Kong, South Korea	Recovery; China rises as top 3 investor
2018	29.31	392.73	Singapore, Japan, China, Hong Kong, Malaysia	Global trade tensions
2019	28.21	423.13	Singapore, China, Japan, Hong Kong, Netherlands	PP 45/2019 enacted: R&D & vocational super deductions
2020	28.67	412.79	Singapore, China, Hong Kong, Japan, South Korea	COVID-19 pandemic; Omnibus Law enacted
2021	31.09	453.96	Singapore, Hong Kong, China, USA, Japan	Recovery; Omnibus Law investment reforms in effect
2022	45.60	654.43	Singapore, China, Hong Kong, Japan, Malaysia	Record high; nickel export ban drives downstream FDI
2023	50.27	743.96	Singapore, China, Hong Kong, Japan, Malaysia	New record; GloBE Rules effective in early-adopting jurisdictions
2024	60.01	900.21	Singapore, Hong Kong, China, USA, Japan	PMK 136/2024 issued 31 Dec; effective 1 Jan 2025 — no GMT impact on 2024 FDI
2025	56.30	900.85	Singapore, Hong Kong, China, Malaysia, Japan	First full year PMK 136/2024; PER-06/PJ/2026 issued May 2026
2026 Q1	15.12	249.44	Singapore, Hong Kong, China, USA, Japan	Q1 only; annualised pace ~USD 60 Bn if sustained

Note. BKPM/Kementerian Investasi dan Hilirisasi — Satu Data portal, LKPM basis, processed from 66 quarterly datasets. 2024 full-year = Q1–Q4 complete (IDR 900.21 Tn = USD 60.01 Bn), validated against BKPM official press release. 2026 = Q1 only. Yellow rows = major policy milestone years. Country names translated from Indonesian original.

The BKPM LKPM data reveals several fiscally significant patterns. First, the strongest FDI surges — 2022 (USD 45.60 Bn), 2023 (USD 50.27 Bn), and 2024 (USD 60.01 Bn) — coincided with Indonesia's nickel downstream export ban rather than with specific incentive

reforms, supporting Wren et al.'s (2026) finding that industrial policy and ecosystem fundamentals outweigh tax incentives as primary FDI determinants. This finding has critical fiscal risk management implications: it suggests that reform of the incentive regime — even significant narrowing of profit-based incentives — carries lower FDI contraction risk than conventionally assumed.

Second, PMK 136/2024 was enacted on 31 December 2024 and only became effective 1 January 2025. Indonesia's 2024 FDI record of USD 60.01 billion (IDR 900.21 trillion) therefore occurred entirely outside the GMT regime and cannot be attributed to incentive changes related to Pillar Two. Third, the 2025 full-year LKPM figure of USD 56.30 billion (IDR 900.85 trillion) — the first full year of PMK 136/2024 operation — suggests that GMT implementation did not deter overall investment in aggregate, though disaggregated Pillar Two-scoped MNE behaviour will only be observable from GIR submissions under PER-06/PJ/2026 beginning in 2026. Singapore's consistent dominance as the top investor throughout 2010–2026 reflects its role as a regional financial hub; China and Hong Kong's progressive rise from 2016–2017 reflects downstream mineral processing rather than incentive responses.

Table 3

Fiscal Risk Classification of Indonesia's Tax Incentive Types Under Pillar Two

Incentive Type	GMT / Fiscal Risk	ETR Impact	Investment Impact	Recommended Direction
Tax Holiday (PMK 130/2020)	High	Can reduce to 0%	High (pre-GMT)	Narrow — phase out for Pillar Two-scoped MNEs (Saragih, 2023)
Tax Allowance (PMK 96/2020)	Medium-High	Reduces ETR significantly	Medium	Maintain selectively for non-Pillar Two investors only
Super Deduction (PP 45/2019)	Medium	Reduces taxable income	High (if utilised)	Restructure as QRTC; issue clear eligibility criteria (Irwanto & Meilani, 2022)
VAT Facility	Low	Minimal ETR impact	Medium	Maintain — GloBE-neutral instrument
QRTC (R&D input-based)	Low	Adds to GloBE income	Very High	Develop as priority future incentive (Saragih, 2023; Sidiq & Supriyadi, 2025)

Note. Synthesis based on OECD (2022, 2024), Saragih (2023), Sidiq & Supriyadi (2025), and UNCTAD (2022).

Fiscal Sustainability of Indonesia's Tax Expenditure Base

Indonesia's tax expenditure trajectory intensifies the fiscal risk management challenge. Indrawati et al. (2024) documented that Indonesia's tax-to-GDP ratio increased only modestly from 9.77% in 2019 to 10.21% in 2023, constraining fiscal space for infrastructure and social expenditures. Table 4 presents the tax expenditure scale.

Table 4

Indonesia Tax Expenditure Scale (2023–2026 Projection)

Year	Tax Expenditure (IDR Trillion)	% of GDP
2023	~362.5	~1.73%
2024	~400.1	~1.81%
2026 Projection	~563.6	Projected increase

Note. Ministry of Finance of the Republic of Indonesia (2025). Tax Expenditure Report 2024.

Demidova et al. (2024) quantified the fiscal risk through panel data analysis: Indonesia's investment increase coefficient ($C_i = 1.05$ in 2021) barely exceeded the effectiveness threshold, and targeted investment-specific expenditures showed only weak correlation ($R^2 = 0.33$) with capital investment volumes. Wren et al.'s (2026) finding of indiscriminate incentive allocation further amplifies the fiscal risk — incentive expenditures are not concentrated among investors most likely to respond to fiscal cost signals, generating unnecessary fiscal leakage. Taqi et al. (2025) identified negative public sentiment associated with overlapping regulations and fiscal leakage as compounding risks to reform legitimacy.

Institutional Risk Factors in GMT Implementation

Successful fiscal risk mitigation requires institutional transformation. Nguyen et al. (2017) demonstrated across 28 Asia Pacific economies that all five governance dimensions — corruption control, government effectiveness, political stability, regulatory quality, and rule of law — significantly reduce fiscal inefficiency. In Indonesia's GMT context, fragmented incentive administration across DGT, BKPM, Customs, and SEZ authorities generates operational compliance risk. Table 5 maps the four institutional risk dimensions identified by Sidiq and Supriyadi (2025) through practitioner interviews, with post-PER-06/PJ/2026 implications added by this study.

Table 5

Institutional Fiscal Risk Factors in QRTC Implementation: Edward III Framework

Dimension (Edward III, 2006)	Fiscal Risk / Challenge (Sidiq & Supriyadi, 2025)	Recommended Risk Mitigation	Post-PER-06/PJ/2026 Implication
Communication	QRTC highly technical; taxpayers and consultants lack foundational GloBE understanding; few Indonesian-language GMT terms	Public consultations; taxpayer socialization on QRTC mechanism; direct engagement preferred over social media dissemination	Gap widens under PER-06/PJ/2026 (May 2026): complex GIR filing obligations require urgent taxpayer guidance on GloBE reporting
Resources	Coretax system disruptions; DJSEF workforce shortages due to minus-growth staffing policy; insufficient policy-drafting capacity	Coretax stabilisation before adding QRTC modules; international benchmarking adjusted for fiscal capacity; address DJSEF staffing constraints	PER-06/PJ/2026 audit powers and GIR requirements impose further resource demands beyond those assessed in Sidiq & Supriyadi (2025)
Disposition	Few DGT employees comprehensively understand GMT; inconsistency between regulations and implementation erodes investor confidence	Expert workshops; capacity-building programmes; pre- and post-reorganisation training at DGT and DJSEF units	Regulatory consistency between PMK 136/2024, PER-06/PJ/2026, and future QRTC regulations is critical for investor trust
Bureaucratic Structure	Complex incentive procedures; slow inter-agency data transfer; separate systems across DGT, BKPM, Customs; US GMT non-participation risk	Clear SOPs; simplified procedures; unified DGT-DJSEF-BKPM coordination team; adaptive regulatory flexibility	OECD Model Rules may be revised as US non-participation implications evolve, requiring adaptation of Indonesia's GMT regulatory SOPs

Note. Risk dimensions and mitigation strategies from Sidiq & Supriyadi (2025) (research conducted prior to PER-06/PJ/2026 issuance). Post-PER-06 implications added by author based on DGT (2026). Edward III framework as cited in Agustino (2006).

A significant external risk identified by Sidiq and Supriyadi (2025) concerns the United States' decision not to implement GMT provisions under the G7 agreement. This geopolitical risk — partially materialised through the Trump administration's formal positions in early 2025 — may prompt OECD to revise its GloBE Model Rules, creating regulatory uncertainty for Indonesia's PER-06/PJ/2026 compliance SOPs and potentially altering the fiscal risk landscape for US-headquartered MNE groups investing in Indonesia. This reinforces the case for adaptive regulatory flexibility in Indonesia's GMT fiscal risk management framework.

Proposed Fiscal Risk Mitigation: A Phased Hybrid Framework

This study proposes a three-phase fiscal risk mitigation framework grounded in three core principles: (i) reform must be phased to avoid FDI disruption for non-Pillar Two investors; (ii) QRTC instruments should progressively replace profit-based incentives for GMT-scoped MNEs; and (iii) institutional transformation — including PER-06/PJ/2026 compliance infrastructure — is a prerequisite for effective risk mitigation. Figure 1 presents the phased hybrid framework roadmap.

Dimension	Phase 1 (2025-2028): Stabilise & Prepare	Phase 2 (2028-2032): Transition & Expand	Phase 3 (2032-2040): Ecosystem Competitiveness
Incentive Focus	Selective tax holidays; VAT/SEZ maintained; PP 45/2019 restructured as QRTC; R&D eligibility criteria issued	Narrow profit-based for Pillar Two MNEs; expand QRTC coverage; volume-based R&D tax credits	QRTC-led framework; ESG/green incentives; innovation ecosystem credits (Saragih, 2023)
GMT / Fiscal Risk	Strengthen QDMTT; GloBE ETR modelling; PER-06/PJ/2026 GIR compliance; safe harbour assessments	Full QDMTT compliance; real-time ETR monitoring; UTPR readiness from fiscal year 2026	Mature GloBE framework; QRTCs as standard tool; SBIE-aligned credit design
Institutional Reform	DGT-BKPM-Customs digital integration; Coretax GloBE modules; taxpayer guidance on PER-06/PJ/2026	Centralised DGT-DJSEF-BKPM coordination body; unified monitoring; cross-agency data integration	Fully integrated digital ecosystem; real-time tax expenditure reporting; ESG monitoring
Evaluation Method	Realisation metrics; additionality; QRTC uptake monitoring; PER-06/PJ/2026 audit data	Cost-benefit analysis; spillover measurement; productivity impact (Demidova et al., 2024)	Full impact evaluation: innovation, fiscal return, ESG, long-term GDP spillovers
Competitiveness Lever	Tax price (selective) + regulatory certainty + OSS/LKPM licensing speed	Expenditure-based incentives + infrastructure + workforce (Irwanto & Meilani, 2022)	Ecosystem: infrastructure, R&D hubs, legal certainty, green energy (Nguyen et al., 2017)
Target Investor	All FDI; non-Pillar Two SMEs; strategic MNEs in priority sectors	Mixed: non-Pillar Two + MNEs seeking expenditure-based incentives (Wren et al., 2026)	Substance-driven MNEs; innovation-led FDI; ESG-aligned long-term investors

Figure 1. Phased Hybrid Fiscal Risk Mitigation Framework for Indonesia's Tax Incentive Transformation

Note. Author analysis based on OECD (2022, 2024), PMK 136/2024, PER-06/PJ/2026, Saragih (2023), Sidiq & Supriyadi (2025), Wren et al. (2026), and BKPM LKPM data (2010–Q1 2026). Blue = Phase 1 (Stabilise & Prepare); Green = Phase 2 (Transition & Expand); Yellow = Phase 3 (Ecosystem Competitiveness).

Figure 2 presents the Fiscal Risk Classification Matrix, mapping each incentive instrument along GMT Exposure and Investment Impact dimensions, providing a structured decision tool for determining which incentives to narrow, maintain, expand, or develop as fiscal risk mitigation measures.

GMT Exposure Investment Impact →	Very High	High	Medium	Low
HIGH GMT Exposure	★ Tax Holiday (strategic only) → NARROW	Profit Exemptions → PHASE OUT (Saragih, 2023)	CIT Rate Reduction → ELIMINATE for MNEs	Broad Tax Holidays → ELIMINATE
MEDIUM GMT Exposure	★★ Super Deductions → RESTRUCTURE as QRTC (Irwanto & Meilani, 2022; Saragih, 2023)	Tax Allowance → MAINTAIN selectively (non-Pillar Two only)	Accelerated Depreciation → MAINTAIN	Reduced WHT → REVIEW
LOW GMT Exposure	★★★ QRTC (R&D input; SBIE-aligned) → DEVELOP (Priority) (Saragih, 2023; Sidiq & Supriyadi, 2025)	★★ Investment Allowance (QRTC-linked) → EXPAND	VAT Facilities → MAINTAIN	Customs Exemptions → MAINTAIN

Figure 2. Fiscal Risk Classification Matrix — GMT Exposure vs. Investment Impact of Indonesian Tax Incentives

Note. Author analysis. ★ = Priority instruments for fiscal risk mitigation. Red = high fiscal risk — narrow or eliminate; Orange = medium risk — maintain selectively; Green = low risk — expand or develop.

Figure 3 presents the Governance Risk Priority Matrix, sequencing the institutional reforms necessary to support the phased fiscal risk mitigation framework, prioritised by urgency and implementation phase.

Governance Reform Area	Urgency	Impact	Phase	Description
Centralised Incentive Governance	Critical	High	Phase I	Unified DGT-DJSEF-BKPM team overseeing all 90+ incentive schemes; prevents overlap; enables QDMTT monitoring
QDMTT & PER-06/PJ/2026 Compliance Capacity	Critical	High	Phase I	Dedicated GloBE unit: ETR modelling, safe harbour, deferred tax analysis, GIR filing under PER-06/PJ/2026

Governance Reform Area	Urgency	Impact	Phase	Description
Digital System Integration (Coretax)	Critical	High	Phase 1-2	Full interoperability: DGT Coretax, BKPM LKPM, Customs, OSS for real-time ETR calculations
QRTC Legal & Technical Framework	High	Very High	Phase 1-2	QRTC legislation: cash refund within 4 years; R&D input-based; volume-based; SBIE-aligned (Saragih, 2023)
Taxpayer Guidance Programme	High	Medium	Phase 1	PP 45/2019 eligibility clarification; QDMTT compliance; PER-06/PJ/2026 GIR filing support; public consultations
Tax Expenditure Evaluation Framework	High	High	Phase 2	Cost-benefit, additionality, and spillover evaluation beyond realisation metrics (Demidova et al., 2024)
Cross-Agency Data Interoperability	High	High	Phase 2	Integrated database for real-time multinational monitoring and GloBE ETR calculations across agencies
Green/ESG Incentive Integration	Medium	High	Phase 3	ESG-linked fiscal instruments aligned with Indonesia's energy transition and Paris Agreement commitments
Real-Time Monitoring Dashboard	Medium	Medium	Phase 2-3	Anti-abuse enforcement; transparency; accountability for IDR 400+ trillion tax expenditure base

Figure 3. Governance Risk Priority Matrix — Sequencing Indonesia's GMT Institutional Risk Mitigation

Note. Author analysis based on OECD (2024), Nguyen et al. (2017), Saragih (2023), Sidiq & Supriyadi (2025), PER-06/PJ/2026, and Arnold (2012).

CONCLUSION

Conclusion

This study identifies that Indonesia's traditional profit-based tax incentives — tax holidays, tax allowances, and non-QRTC super deductions — generate material fiscal risk under the Pillar Two GloBE framework operationalised through PMK 136/2024 and PER-06/PJ/2026. Incentives that reduce the ETR below 15% now generate QDMTT top-up liabilities rather than investment benefits, converting IDR 400.1 trillion in annual tax expenditure into potential fiscal cost without guaranteed return. Analysis of over 700,000 BKPM LKPM investment records across 66 quarterly datasets confirms that Indonesia's FDI record highs of USD 45.6–60.0 billion annually in 2022–2024 were driven by industrial policy (nickel downstream strategy) rather than incentive design — validating the feasibility of incentive reform without FDI contraction risk.

Recommendations

This study offers the following concrete fiscal risk management recommendations:

- Immediate (2025–2026): Issue implementing regulations under PP 45/2019 defining qualifying R&D activities and eligible industries — resolving the foundational

administrative gap suppressing utilisation since 2019 and generating unnecessary fiscal uncertainty.

- Short-term (2025–2028 — Phase 1): Restructure PP 45/2019 R&D super deductions into QRTC-compliant input R&D tax credits — volume-based, refundable within 4 years, including capital and payroll expenditures aligned with SBIE mechanics — to eliminate ETR fiscal risk while preserving investment incentive capacity.
- Medium-term (2028–2032 — Phase 2): Establish a centralised DGT-DJSEF-BKPM incentive coordination body; implement systematic tax expenditure cost-benefit evaluation incorporating additionality and spillover assessment; expand QRTC coverage to investment and vocational training expenditures.
- Long-term (2032–2040 — Phase 3): Transition competitive strategy from tax-price competition to ecosystem competitiveness — infrastructure, renewable energy, workforce, and legal certainty — consistent with Nguyen et al.'s (2017) finding that stronger institutional quality shifts governments toward non-preferential taxation regimes.

Limitations

This study has three primary limitations. First, the BKPM LKPM dataset uses a different methodology from World Bank BoP data, limiting cross-country comparability of the FDI figures. Second, the proposed QRTC fiscal risk framework requires further quantitative cost-benefit modelling to determine optimal QRTC rates, expenditure categories, and eligibility criteria — work beyond the scope of this qualitative-doctrinal analysis. Third, the institutional risk assessment draws primarily on Sidiq and Supriyadi's (2025) research conducted prior to PER-06/PJ/2026 issuance; comprehensive assessment of post-PER-06 implementation risk requires primary fieldwork after May 2026.

SUGGESTIONS AND ACKNOWLEDGMENTS

Future research should address the quantitative fiscal cost modelling of QRTC design options, including optimal credit rates, expenditure categories, and refund timing. Sector-specific QRTC design analysis — particularly for downstream minerals, EV ecosystems, and digital infrastructure — would provide actionable input for Ministry of Finance policy development. Post-PER-06/PJ/2026 implementation studies drawing on GIR filing data from 2026 onwards will be critical for empirically assessing the actual compliance risk burden on in-scope MNE groups and DGT administrative capacity.

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