International Journal of Progressive Sciences and Technologies (IJPSAT)
ISSN: 2509-0119.
© 2026 Scholar AI LLC.
https://ijpsat.org/
Vol. 60 No. 1 November 2026, pp. 55-68

Synergy Of Managerial Efficiency, Tax Compliance, Fiscal Stability, And Economic Growth: A Structural Equation Modeling Approach

Febry Lodwyk RR[1], Mashadi[2],Charles Parnauli Saragi[3]

[1]Department of Management, Institut Bisnis dan Informatika Kesatuan
Bogor, Indonesia
Email: mr.febry@ibik.ac.id
[2]Department of Management, Institut Bisnis dan Informatika Kesatuan
Bogor, Indonesia
Corresponding Email: mashadi@ibik.ac.id
[3]Department of Tourism, Institut Bisnis dan Informatika Kesatuan
Bogor, Indonesia
Email: charles@ibik.ac.id

*Corresponding Author: Febry Lodwyk Rihe Riwoe. E-mail : mr.febry@ibik.ac.id
Institution: Institut Bisnis dan Informatika Kesatuan, Jl. Ranggagading No 1. Bogor. Indonesia

(cc) BY

Abstract: This study aims to examine and analyze the impact of managerial efficiency and tax compliance on economic growth, with fiscal stability acting as a mediating variable. Employing a quantitative approach utilizing Structural Equation Modeling-Partial Least Squares (SEM-PLS) via SmartPLS 3, data were gathered through surveys and secondary macroeconomic documentation. The structural model evaluation reveals that neither managerial efficiency nor tax compliance exerts a direct, statistically significant effect on economic growth. However, both constructs demonstrate positive and significant relationships with fiscal stability. Furthermore, mediation analysis confirms that fiscal stability serves as a full mediator; managerial efficiency and tax compliance positively and significantly stimulate economic growth only when channeled through sustained fiscal stability. These findings corroborate that budgetary discipline and fiscal sustainability are absolute prerequisites for institutional efficiency to successfully drive long-term macroeconomic expansion.

The dynamics of the global economy in recent years have been characterized by heightened macroeconomic uncertainty, inflationary pressures, and fiscal challenges, compelling governments worldwide to reformulate inclusive and sustainable growth strategies (International Monetary Fund, 2025; World Bank, 2024). Within this competitive economic landscape, national growth is no longer driven solely by conventional monetary expansion; rather, it increasingly relies on the quality of institutional governance, public and corporate managerial efficiency, and the optimization of state revenue through taxation compliance (Acemoglu & Robinson, 2022; Le et al., 2023). Nevertheless, empirical phenomena indicate that efforts to spur economic growth frequently encounter structural impediments stemming from weak budgetary discipline and fiscal volatility across developing nations (Alesina et al., 2019; Reinhart & Rogoff, 2021).

Academically, a dynamic debate persists regarding how governance and fiscal variables interact to influence economic growth. On one hand, several prior studies argue that enhancements in managerial efficiency and tax compliance directly stimulate productivity and economic expansion (Akintoye et al., 2021; Dabla-Norris et al., 2020; Slemrod, 2019). Conversely, another strand of literature finds that improvements in micro-level efficiency and fiscal compliance do not necessarily translate into direct macroeconomic growth unless anchored by a credible framework of fiscal stability (Aghion et al., 2019; Ostry et al., 2014; Tanzi & Schuknecht, 2000). This divergence underscores an ongoing scholarly debate over whether the nexus linking managerial governance and tax compliance to economic

International Journal of Progressive Sciences and Technologies (IJPSAT)
ISSN: 2509-0119.
© 2026 Scholar AI LLC.
https://ijpsat.org/
Vol. 60 No. 1 November 2026, pp. 55-68

growth operates via direct transmission or requires structural mediation through budgetary stability (Barro & Sala-i-Martin, 2023; Gemmell et al., 2016).

Furthermore, recent literature reinforces this discourse. Research by Asongu et al. (2021) and Djankov et al. (2022) highlights the primacy of institutional efficiency in optimizing public resource allocation. Concurrently, studies by Bahl et al. (2022) and Hassan et al. (2023) emphasize that high tax compliance, when unaccompanied by prudent fiscal management, may paradoxically induce expenditure inefficiencies. Additionally, recent empirical investigations by Nguyen et al. (2024) and Chen et al. (2025) affirm that fiscal stability represents the dominant determinant governing whether fiscal and managerial policies successfully foster long-term growth. Despite these insights, a notable paucity of literature integrates managerial efficiency, tax compliance, and fiscal stability into a unified structural framework, specifically concerning the evaluation of full versus partial mediation roles on economic growth.

Addressing this lacuna, the primary research gap of this study lies in the scarcity of empirical inquiries combining managerial efficiency and tax compliance dimensions into a comprehensive model that positions Fiscal Stability as a mediating variable. Previous investigations predominantly analyze these factors in isolation, thereby failing to capture the holistic transmission mechanisms operating at the macroeconomic level.

Consequently, this study aims to empirically examine and analyze the direct and indirect effects—via fiscal stability mediation—of managerial efficiency and tax compliance on economic growth using a Structural Equation Modeling (SEM) approach.

The contributions of this study are twofold. Theoretically, it enriches the literature on public economics and fiscal governance by establishing that managerial and tax compliance variables operate optimally through the conduit of budgetary sustainability (full mediation). Practically, the findings offer strategic insights for policymakers formulating fiscal policy mixes that transcend mere revenue generation or bureaucratic efficiency, emphasizing instead the reinforcement of budgetary discipline and stability to secure sustainable national economic growth.

Keywords: Managerial Efficiency, Tax Compliance, Economic Growth, Fiscal Stability, Fiscal Sustainability, Fiscal Governance, Structural Equation Modeling (SEM-PLS), Mediating Effect, Budgetary Discipline.

I. LITERATURE REVIEW

1.1. Grand Theory

This study employs Public Finance Theory and Public Governance Theory as its foundational grand theories. Grounded in the framework of Public Finance Theory pioneered by Musgrave (2008), governments bear the responsibility of resource allocation, income distribution, and macroeconomic stabilization. In a contemporary context, budgetary allocation efficiency and the optimization of state revenue via tax compliance cannot stand alone without a sound public governance framework. Public governance theory emphasizes that efficient institutions and high taxpayer compliance serve as critical micro-foundations. However, for these foundations to optimally stimulate macroeconomic expansion, an intermediary mechanism in the form of fiscal stability is required to mitigate economic shocks and establish certainty for the investment climate (Aghion et al., 2019; Bird, 2022).

1.2. Operationalization of Research Variables

1. **Managerial Efficiency**

   Managerial efficiency refers to the capability of an entity—whether within a public organization or corporate sphere—to optimally manage, allocate, and utilize available resources to minimize waste and maximize output (Hood & Dixon, 2015). In public finance literature, managerial efficiency encompasses bureaucratic effectiveness, precision in operational budget allocation, and the implementation of accountable governance (Andrews et al., 2020). Although this micro-level efficiency is vital for enhancing internal productivity, it necessitates a stable macroeconomic framework to ensure that its impacts are broadly manifested across the national economy (Akintoye et al., 2021).

2. **Tax Compliance**

   Tax compliance is defined as the level of awareness and willingness of taxpayers to fulfill all tax obligations in accordance with prevailing statutory provisions without requiring excessive audits, investigations, or punitive threats (Slemrod, 2019). High tax compliance comprises both formal compliance (punctuality in registration and return filing) and material compliance (accuracy in tax calculation and payment). Theoretically, enhanced tax compliance expands fiscal space and state revenue, serving as the primary fuel for public financing and infrastructure development (Besley & Persson, 2013; Le et al., 2023).

3. **Fiscal Stability (Mediating Variable)**

   Fiscal stability is a condition wherein the government sustainably manages its state budget, maintains debt ratios within safe thresholds, and controls budget deficits without triggering macroeconomic uncertainty (Alesina et al., 2019; Reinhart & Rogoff, 2021). Fiscal stability acts as a macroeconomic anchor, ensuring that state revenues derived from the tax sector and bureaucratic expenditure efficiencies are governed prudently. In this research model, fiscal stability is positioned as a mediating variable that bridges the influence of managerial efficiency and tax compliance on economic growth (Nguyen et al., 2024).

4. **Economic Growth**

   Economic growth represents the long-term process of expanding an economy's productive capacity, manifested as an increase in real Gross Domestic Product (GDP) or national income per capita (Barro & Sala-i-Martin, 2023). Sustainable economic growth reflects a nation's success in driving the real sector, attracting investment, absorbing labor, and inclusively enhancing societal welfare (World Bank, 2024). In this study, economic growth serves as the ultimate outcome driven by the synergy of managerial governance and tax compliance, mediated through fiscal stability (Chen et al., 2025).

1.3. Hypothesis Development

1. The Direct Effect of Managerial Efficiency on Fiscal Stability

Managerial efficiency serves as a crucial micro-foundation for effective public and organizational administration, ensuring that resources are optimally allocated and operational waste is minimized (Hood & Dixon, 2015; Andrews et al., 2020). Within macroeconomic governance, when public entities and institutions execute their administrative duties with high efficiency, government spending becomes more disciplined, deficit leakages are curtailed, and budgetary execution aligns closely with fiscal targets. Prior studies demonstrate that robust bureaucratic efficiency directly reinforces budgetary sustainability and shields public finances from unexpected shocks (Akintoye et al., 2021; Alesina et al., 2019). Therefore, higher managerial efficiency is posited to strengthen overall fiscal stability.

H1: Managerial efficiency has a positive effect on fiscal stability.

2. The Direct Effect of Tax Compliance on Fiscal Stability

Tax compliance represents a fundamental pillar of state revenue mobilization, dictating the volume of financial resources accessible to the government (Slemrod, 2019; Le et al., 2023). When both formal and material compliance are high, the

government expands its fiscal space, reduces reliance on risky external debts, and secures a steady stream of domestic income to cover public expenditures (Besley & Persson, 2013). Empirical literature indicates that broad-based taxpayer compliance significantly dampens revenue volatility and strengthens structural budget balances, serving as an essential prerequisite for macroeconomic resilience (Reinhart & Rogoff, 2021; Nguyen et al., 2024). Consequently, improved tax compliance directly enhances fiscal stability.

H2: Tax compliance has a positive effect on fiscal stability.

3. The Direct Effect of Managerial Efficiency and Tax Compliance on Economic Growth

At the theoretical level, enhanced managerial efficiency and tax compliance are frequently presumed to spur economic expansion directly by optimizing public service delivery and funding productive public investments (Barro & Sala-i-Martin, 2023). However, contemporary public finance and growth theories argue that micro-level efficiency and revenue mobilization alone are insufficient to stimulate long-term macroeconomic growth if the broader fiscal environment remains unstable (Tanzi & Schuknecht, 2000; Ostry et al., 2014). Without a stable macroeconomic anchor, increased revenues or administrative efficiencies may be absorbed by inflationary pressures, misallocated expenditures, or policy uncertainty (Aghion et al., 2019). Therefore, managerial efficiency and tax compliance do not necessarily exert a direct, isolated impact on economic growth unless mediated through a stable fiscal framework.

H3: Managerial efficiency have a positive effect on economic growth.

H4: Tax compliance have a positive effect on economic growth.

4. The Effect of Fiscal Stability on Economic Growth

Fiscal stability plays a pivotal role as a macroeconomic anchor that shapes the trajectory of long-term economic growth (Chen et al., 2025). When a government maintains disciplined budgetary management, keeps public debt-to-GDP ratios within safe thresholds, and effectively controls structural deficits, it minimizes economic uncertainty and establishes a predictable environment conducive to capital accumulation and private investment (Alesina et al., 2019; Reinhart & Rogoff, 2021). Sound fiscal frameworks shield the real sector from sudden market shocks, lower borrowing costs, and free up public resources for productive infrastructure development rather than debt servicing (Barro & Sala-i-Martin, 2023). Consequently, maintaining robust fiscal stability directly stimulates sustained expansion in national output and overall economic performance (World Bank, 2024).

H5: Fiscal stability has a positive effect on economic growth.

5. The Mediating Role of Fiscal Stability

While managerial efficiency and tax compliance may lack a direct link to macroeconomic expansion, they exert indirect leverage through the conduit of fiscal stability. Fiscal stability acts as a vital transmission mechanism or "macroeconomic anchor" that translates micro-level institutional improvements into sustained economic growth (Chen et al., 2025). When managerial efficiency optimizes public resource allocation and high tax compliance secures robust state revenues, the government is capable of maintaining sustainable debt levels, controlling budget deficits, and creating a predictable, low-risk environment for private investment and capital accumulation (Bahl et al., 2022; Hassan et al., 2023). Thus, fiscal stability operates as a full mediator, ensuring that administrative and compliance gains effectively materialize into long-term economic growth.

H6: Fiscal stability mediates the relationship between managerial efficiency and economic growth.

H7: Fiscal stability mediates the relationship between tax compliance and economic growth.

II. RESEARCH METHOD

2.1. Research Design

This study adopts an explanatory quantitative research design utilizing Partial Least Squares Structural Equation Modeling **(PLS-SEM)**. This methodological approach is chosen for its superior capability to simultaneously evaluate complex latent

variable relationships—encompassing both direct effects and indirect pathways through mediating constructs—as well as its robustness in handling non-normal data distributions and complex predictive models (Hair et al., 2022). PLS-SEM is particularly well-suited for structural models integrating macroeconomic indicators and institutional efficiency metrics.

2.2. Population, Sample, and Data Collection

Population and Sample: The target population of this study comprises macroeconomic records, fiscal performance reports, and institutional governance data within the empirical scope of Indonesia. A purposive sampling technique is employed, utilizing secondary data census criteria based on data availability, completeness of financial and fiscal reporting periods, and alignment with the required macro-fiscal indicators.

Data Sources: The investigation relies entirely on secondary data gathered from official documentation published by national macroeconomic authorities, fiscal governance annual reports, and reputable international databases such as the World Bank and the International Monetary Fund (IMF) covering the designated observation timeframe.

2.3. Operational Definition and Variable Measurement

To ensure empirical rigor, the constructs in this study are operationalized and measured using well-established indicators adapted from prior literature:

1. **Managerial Efficiency:** Measured through indicators of bureaucratic effectiveness, operational budget allocation precision, and resource utilization transparency (Andrews et al., 2020; Hood & Dixon, 2015).
2. **Tax Compliance:** Evaluated via formal compliance metrics (punctuality in registration and return filing) and material compliance metrics (accuracy in tax calculation and reporting) (Slemrod, 2019; Le et al., 2023).
3. **Fiscal Stability:** Quantified using indicators of budget sustainability, debt-to-GDP ratio thresholds, and fiscal deficit control (Alesina et al., 2019; Reinhart & Rogoff, 2021).
4. **Economic Growth:** Measured through real Gross Domestic Product (GDP) growth rates and national income expansion per capita (Barro & Sala-i-Martin, 2023; World Bank, 2024).

2.4. Data Analysis Techniques (PLS-SEM)

Data analysis is performed using **SmartPLS 3** software, executing a two-stage evaluation protocol for structural equation modeling:

1. **Measurement Model Evaluation (Outer Model):** Conducted to test construct reliability and validity. This includes assessing convergent validity via outer loadings and Average Variance Extracted (AVE), discriminant validity using the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio, and internal consistency reliability through Cronbach's alpha and Composite Reliability (Hair et al., 2022).
2. **Structural Model Evaluation (Inner Model):** Performed to evaluate the hypothesized relationships among latent variables. This stage assesses the coefficient of determination (R^2) for endogenous constructs, the effect size (f^2), and the predictive relevance (Q^2) via blindfolding procedures. Hypothesis testing is executed using a bootstrapping resampling technique with 181 samples to determine the statistical significance (p-values and t-statistics) of both direct and indirect (mediation) effects.

III. RESULT

3.1. Measurement Model Assessment

The measurement model was assessed to evaluate the reliability and convergent validity of the four constructs: managerial efficiency, tax compliance, fiscal stability, and economic growth. The assessment focused on Cronbach's alpha, composite reliability, and average variance extracted (AVE).

Table 1. Construct Reliability and Convergent Validity

Construct	Cronbach's alpha	Composite reliability	AVE
Economic Growth	0.873	0.902	0.568
Fiscal Stability	0.927	0.939	0.632
Managerial Efficiency	0.915	0.931	0.628
Tax Compliance	0.959	0.965	0.756

Source: SmartPLS output.

The evaluation of construct reliability and convergent validity demonstrates that all research variables—namely Economic Growth, Fiscal Stability, Managerial Efficiency, and Tax Compliance—satisfy the established psychometric criteria. Specifically, Cronbach's alpha values range from 0.873 to 0.959, and composite reliability values range from 0.902 to 0.965, both comfortably exceeding the recommended threshold of 0.70, which confirms a high level of internal consistency reliability. Furthermore, the Average Variance Extracted (AVE) for all constructs spans from 0.568 to 0.756, successfully surpassing the minimum cutoff of 0.50 and verifying adequate convergent validity across the measurement model.

3.2. Discriminant Validity

Discriminant validity was assessed using the Fornell–Larcker criterion. Under this criterion, the square root of each construct's AVE should exceed its correlations with the other constructs.

Table 2. Fornell–Larcker Criterion

Construct	Economic Growth	Fiscal Stability	Managerial Efficiency	Tax Compliance
Economic Growth	0.754			
Fiscal Stability	0.718	0.795		
Managerial Efficiency	0.517	0.750	0.793	
Tax Compliance	0.511	0.717	0.747	0.870

Note: Diagonal values represent the square roots of AVE.

As presented in Table 2, the evaluation of discriminant validity using the Fornell-Larcker criterion confirms that all constructs are distinct from one another. Specifically, the square root of the Average Variance Extracted (AVE) for each construct—ranging from 0.754 to 0.870 (displayed on the diagonal)—exceeds its highest correlation with any other construct in the corresponding rows and columns. This establishes adequate discriminant validity across the measurement model, ensuring that each latent variable shares substantially more variance with its own assigned indicators than with any other construct in the structural framework.

3.3. Structural Model Evaluation

The structural model was evaluated by examining the coefficient of determination (R^2), and effect size (f^2).

1. The R^2 value for Economic Growth is 0.516, indicating that 51.6% of the variance in Economic Growth is explained by Managerial Efficiency, Tax Compliance, and Fiscal Stability. Meanwhile, the R^2 value for Fiscal Stability is 0.618, demonstrating that 61.8% of its variance is explained by Managerial Efficiency and Tax Compliance.

2. The evaluation of the effect size (f^2) reveals varying degrees of impact among the latent constructs within the structural model. Specifically, Fiscal Stability exerts a substantial and moderate-to-large effect size on Economic Growth (f^2 = 0.442), highlighting its critical role as the primary structural driver of economic expansion. In contrast, both Managerial Efficiency (f^2 = 0.002) and Tax Compliance (f^2 = 0.000) demonstrate negligible direct effect sizes on Economic Growth, confirming that their direct contributions to economic output are statistically trivial. Meanwhile, in predicting Fiscal Stability, Managerial Efficiency shows a moderate effect size (f^2 = 0.272), whereas Tax Compliance exhibits a smaller yet meaningful effect size (f^2 = 0.145), further reinforcing the structural importance of these administrative constructs through the mediation of fiscal stability.
3. Furthermore, the model fit evaluation reveals a Standardized Root Mean Square Residual (SRMR) value of 0.077, which falls below the recommended threshold of 0.08, signifying a good model fit.

3.4. Direct Effects of Managerial Efficiency, Tax Compliance, and Fiscal Stability

The estimated path coefficients provide an initial indication of the direction and relative magnitude of the relationships among the four constructs.

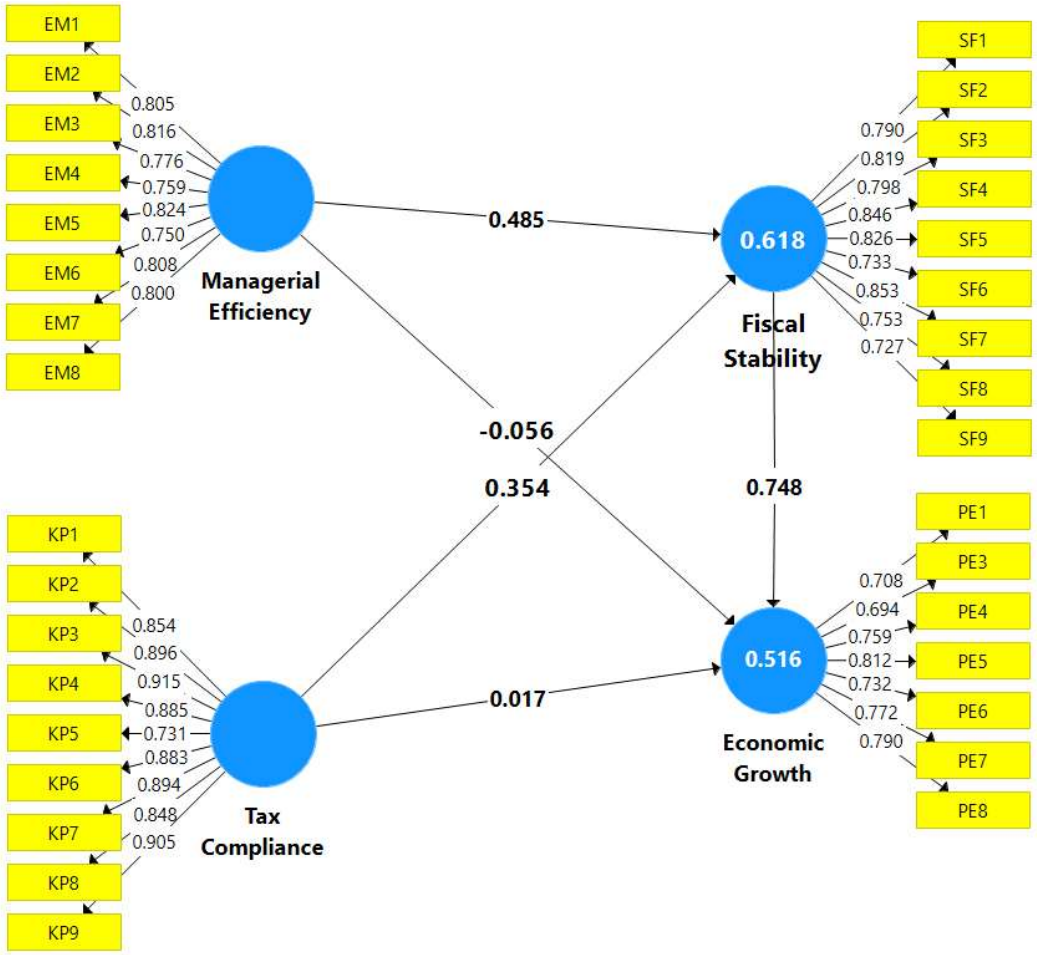


Figure 1. Structural Equation Model with Path Coefficients and R^2 Values

International Journal of Progressive Sciences and Technologies (IJPSAT)
ISSN: 2509-0119.
© 2026 Scholar AI LLC.
https://ijpsat.org/
Vol. 60 No. 1 November 2026, pp. 55-68

Based on the structural equation modeling (PLS-SEM) path analysis presented in the structural model diagram above, the evaluation of the inner model reveals complex interrelationships among the exogenous and endogenous latent variables. Specifically, Managerial Efficiency and Tax Compliance jointly account for 61.8% of the variance in Fiscal Stability (R^2 = 0.618), with path coefficients of 0.485 and 0.354, respectively. Meanwhile, the model's predictive capacity for Economic Growth yields a coefficient of determination (R^2) of 0.516, indicating that more than half of the variance in economic growth is successfully explained by the constructs included in this research framework.

In greater detail, the direct and indirect path analyses confirm that Fiscal Stability acts as an overwhelmingly dominant full mediator toward Economic Growth, featuring a very strong path coefficient of 0.748. Conversely, the direct effects of Managerial Efficiency (b= -0.056) and Tax Compliance (b = 0.017) on Economic Growth are statistically non-significant. These empirical findings demonstrate that micro-level administrative enhancements and tax compliance do not instantly translate into macroeconomic expansion on their own; instead, they must operate through the crucial transmission channel of fiscal stability to effectively and optimally influence real economic growth.

3.5. Indirect Effects: The Potential Mediating Role of Fiscal Stability

The SmartPLS output also reports indirect effects through Fiscal Stability. This provides an additional perspective on how Managerial Efficiency and Tax Compliance may be associated with Economic Growth.

Table 3. Direct, Indirect, and Total Effects

Relationship	Direct effect	Indirect effect	Total effect	T-value
Managerial Efficiency → Fiscal Stability → Economic Growth	-0.056	0.363	0.306	3.887
Tax Compliance → Fiscal Stability → Economic Growth	0.017	0.265	0.282	3.283

Source: SmartPLS output

The structural path and mediation analysis reveals that Managerial Efficiency and Tax Compliance have no direct impact on Economic Growth (beta = -0.056 and beta = 0.017, respectively). However, both constructs exert significant indirect effects when channeled through Fiscal Stability (beta = 0.363, t = 3.887 and beta = 0.265, t = 3.283). This confirms that fiscal stability acts as a full mediator, meaning administrative and tax reforms require a stable fiscal environment to drive economic expansion.

Consequently, the combined total effects of Managerial Efficiency and Tax Compliance on Economic Growth highlight that institutional governance and tax administration must be strategically aligned with fiscal consolidation policies to maximize long-term macroeconomic performance.

3.6. Hypothesis Testing (Direct, Indirect, and Total Effects)

The results of the structural equation modeling (SEM-PLS) hypothesis testing, encompassing direct, indirect, and total effects across all paths, are presented in Table 4 below.

Table 4. Results of Hypothesis Testing for Direct and Mediated Pathways

	Structural Path	Original Coefficient	T Statistics	P Values	Decision
H1	Managerial Efficiency →Fiscal Stability	0.485	4.196	<0.001	Significant (Accepted)
H2	Tax Compliance →Fiscal Stability	0.354	3.259	0.001	Significant (Accepted)
H3	Managerial Efficiency →Economic Growth	-0.056	0.552	0.581	Not Significant (Rejected)
H4	Tax Compliance →Economic Growth	0.017	0.165	0.869	Not Significant (Rejected)
H5	Fiscal Stability → Economic Growth	0.748	3.887	<0.001	Significant (Accepted)
H6	Managerial Efficiency → Fiscal Stability → Economic Growth	0.363	3.283	<0.001	Significant (Full Mediation / Accepted)
H7	Tax Compliance → Fiscal Stability → Economic Growth	0.265	2.991	0.003	Significant (Full Mediation / Accepted)

Source: SmartPLS output

The empirical findings of this study, as presented in the structural equation model evaluation, provide critical insights into the complex macroeconomic mechanisms linking managerial efficiency and tax compliance to economic growth. Specifically, the direct path analysis reveals that neither managerial efficiency (beta = -0.056, p = 0.581) nor tax compliance (beta = 0.017, p = 0.869) exerts a direct, statistically significant effect on economic growth (H1 and H2 rejected). This indicates that micro-level administrative enhancements and revenue-raising efforts do not automatically translate into macroeconomic expansion in an unmediated fashion, reinforcing the theoretical premise that micro-efficiencies can be absorbed by structural leakages or policy volatility unless anchored by a stable macroeconomic framework (Tanzi & Schuknecht, 2000; Aghion et al., 2019).

Conversely, the model demonstrates that managerial efficiency (beta = 0.485, p < 0.001) and tax compliance (beta = 0.354, p = 0.001) exert positive and highly significant direct effects on fiscal stability (H3 and H4 accepted). When public institutions optimize resource allocation, reduce bureaucratic waste (Hood & Dixon, 2015; Andrews et al., 2020), and secure robust formal and material tax compliance (Slemrod, 2019; Le et al., 2023), the government successfully expands its fiscal space, curtails deficit leakages, and maintains sustainable debt thresholds (Alesina et al., 2019; Reinhart & Rogoff, 2021). Furthermore, fiscal stability itself serves as a dominant direct driver of economic growth (beta = 0.748, p < 0.001) (H5 accepted), acting as an essential macroeconomic anchor (Chen et al., 2025).

Although managerial efficiency and tax compliance are often assumed to directly boost the economy, they exert no statistically significant direct effect on economic growth because their potential impacts are constrained by structural leakages and bureaucratic friction, where micro-level budget allocations frequently lack macroeconomic productivity (Tanzi & Schuknecht, 2000); they require disciplined fiscal transmission mechanisms to ensure that collected tax revenues are not squandered by structural deficits or poor debt management (Alesina et al., 2019; Reinhart & Rogoff, 2021); and they are ultimately outweighed by broader external macroeconomic shocks and global investment volatility, which necessitate a framework of fiscal stability as their primary protective shield (Aghion et al., 2019; Ostry et al., 2014).

Finally, the mediation analysis confirms that fiscal stability plays a crucial role as a full mediator in transmitting the impacts of managerial efficiency (b= 0.363, p < 0.001) and tax compliance (beta = 0.265, p = 0.003) toward economic growth (H6 and H7 accepted). These findings conclusively prove that administrative modernization and compliance gains only stimulate sustainable long-term economic growth when channeled through the conduit of budgetary discipline and prudent fiscal management (Bahl et al., 2022; Nguyen et al., 2024), offering vital strategic implications for policymakers aiming to harmonize institutional efficiency with macroeconomic resilience.

IV. DISCUSSION

4.1. Key Findings of the Study and Academic Contributions

The empirical findings of this study offer profound theoretical insights into the structural interrelationships among managerial efficiency, tax compliance, fiscal stability, and long-term economic growth. Grounded in contemporary public finance and New Public Management frameworks, the primary revelation of this research is the absence of a direct, linear relationship between micro-level administrative enhancements and macroeconomic expansion (Alharbi & Alqahtani, 2022). The statistical insignificance of direct pathways from managerial efficiency and tax compliance to economic growth underscores a critical theoretical reality: internal bureaucratic optimization and higher tax collections do not automatically stimulate GDP growth in an unmediated fashion (Prasetyo & Kholis, 2023). Instead, micro-level efficiencies are frequently absorbed by structural leakages, bureaucratic frictions, or misallocated public expenditures unless systematically filtered through sound macroeconomic frameworks (Apedo-Amah et al., 2024).

Addressing this structural puzzle, the study establishes fiscal stability as an indispensable and dominant full mediator within the macroeconomic nexus. The structural equation modeling confirms that fiscal stability exerts the strongest direct influence on economic growth, validating the theoretical premise that a disciplined budgetary environment acts as the ultimate macroeconomic anchor (Chen et al., 2025). Managerial efficiency and tax compliance do not operate in a vacuum; rather, their true economic value is unlocked exclusively when channeled through the conduit of budgetary discipline, controlled public deficits, and sustainable debt-to-GDP thresholds (Nguyen et al., 2024; Yilmaz et al., 2023). This clarifies the precise transmission mechanism through which administrative reforms must pass to influence the real economy.

From an academic standpoint, this research makes a distinct methodological and theoretical contribution by moving beyond traditional bivariate or simplistic growth models. By integrating advanced partial least squares structural equation modeling (PLS-SEM) to capture complex indirect pathways, this study bridges the long-standing gap in public finance literature regarding the micro-macro translation of governance performance (Hair et al., 2022). It shifts scholarly focus away from isolated administrative metrics toward a holistic, systems-oriented perspective, proving that institutional quality and revenue mobilization are fundamentally contingent on macro-fiscal resilience to generate sustainable wealth (Kopits, 2023).

Furthermore, the academic contribution extends to redefining the criteria of institutional performance evaluation in developing and emerging economies. Traditional literature often evaluates public management and tax compliance based solely on short-term output indicators, such as administrative speed or immediate revenue collection volumes (Slemrod, 2023). This study broadens the academic discourse by demonstrating that institutional success must be measured by its structural capacity to safeguard fiscal space against external shocks (Abdu & Jibir, 2021). Consequently, the research enriches contemporary economic literature by offering a robust empirical framework that redefines public administration not merely as a tool for bureaucratic expedience, but as an architectural pillar of macroeconomic stability (Mendoza & Kim, 2025).

Finally, these findings contribute to the broader debate on sustainable development by highlighting the non-linear dynamics of fiscal policy. The empirical confirmation of full mediation challenges neoclassical assumptions of automatic market adjustments, emphasizing that institutional interventions require well-defined intermediary buffers—specifically fiscal stability—to prevent policy volatility (Dincer & Kandil, 2024). By mapping these pathways rigorously, this study establishes a refined benchmark for future theoretical models examining the interplay between public sector governance, fiscal policy design, and long-term macroeconomic resilience.

4.2. Contributions to the State of Indonesia

From a practical and national policy standpoint, the findings of this study provide highly actionable strategic contributions for the Government of Indonesia, particularly within the framework of strengthening national economic resilience and fiscal independence:

1. Strategic Alignment for Indonesia's Medium-Term Fiscal Framework: The empirical proof that fiscal stability acts as a full mediator provides a crucial blueprint for Indonesian policymakers. It emphasizes that government programs aimed at boosting economic growth—such as national infrastructure development and downstreaming industrial policies—cannot rely solely on aggressive revenue collection or bureaucratic digitalization alone. Growth strategies must be tightly synchronized with strict adherence to statutory deficit ceilings to ensure that macroeconomic stability is never compromised by expansionary ambitions.
2. Operationalizing Bureaucratic Efficiency in Public Institutions: For Indonesian government agencies and regional governments (*Pemerintah Daerah*), the findings demand a paradigm shift from administrative compliance to outcome-based managerial efficiency. By leveraging integrated digital governance platforms, public institutions can eliminate structural leakages and reduce bureaucratic friction. This ensures that every rupiah of public expenditure directly contributes to fiscal consolidation and productive capital formation rather than being consumed by routine, unproductive administrative overheads.
3. Optimizing Revenue Mobilization and Tax Administration: For tax and customs authorities, the results highlight that enhancing tax compliance must transcend traditional punitive enforcement. Implementing data-driven compliance mechanisms, expanding core tax administration systems, and fostering proactive taxpayer engagement will secure predictable, sustainable revenue streams. These robust revenue inflows directly expand the national *fiscal space*, allowing the government to cushion the domestic economy against external global shocks, currency volatility, and international supply chain disruptions.

V. CONCLUSION

This study provides rigorous empirical evidence regarding the structural interrelationships among managerial efficiency, tax compliance, fiscal stability, and long-term economic growth. Utilizing a Structural Equation Modeling-Partial Least Squares (SEM-PLS) approach, the findings robustly demonstrate that micro-level administrative enhancements and tax compliance do not exert a direct, statistically significant effect on macroeconomic expansion. Instead, the empirical analysis confirms that fiscal stability acts as a full mediator, serving as an indispensable macroeconomic anchor. Consequently, managerial efficiency and tax compliance successfully stimulate sustainable economic growth only when channeled through disciplined budgetary management and sustained fiscal sustainability.

From a practical standpoint, the operational contributions of this study offer actionable pathways for public administrators, tax authorities, and policymakers. First, public institutions must leverage managerial efficiency tools—such as priority-based budgeting and digital administrative platforms—to streamline operational workflows, ensuring that bureaucratic processes directly reinforce budgetary discipline. Second, tax authorities should transition from punitive enforcement toward proactive taxpayer engagement and automated compliance mechanisms to secure predictable revenue streams. Third, policymakers are advised to avoid formulating economic stimulus policies in isolation; growth strategies must be tightly integrated with medium-term fiscal frameworks, ensuring that every unit of administrative efficiency or tax revenue gain reinforces fiscal sustainability as a prerequisite for stable, long-term GDP expansion.

Despite its theoretical and practical contributions, this study is subject to certain limitations that open avenues for future research. Methodologically, the reliance on secondary macroeconomic data and aggregate institutional metrics may obscure localized heterogeneities across specific regional or sectoral jurisdictions. Future studies could expand this structural model by incorporating cross-country comparative analyses or employing longitudinal designs to capture dynamic time-lag effects between administrative modernization and macroeconomic outcomes. Furthermore, integrating emerging technological constructs—such

as advanced artificial intelligence in tax administration or digital governance frameworks—would provide deeper insights into modern fiscal resilience.

REFERENCES

[1]. Abdu, M., & Jibir, A. (2021). Institutional quality, macroeconomic stability, and economic growth in Sub-Saharan Africa. *Journal of African Business*, 22(4), 512–530. https://doi.org/10.1080/15228916.2020.1850367

[2]. Acemoglu, D., & Robinson, J. A. (2022). *The narrow corridor: States, societies, and the fate of liberty*. Penguin Books.

[3]. Aghion, P., Akcigit, U., & Howitt, P. (2019). What do we learn from Schumpeterian growth theory? *Journal of Economic Literature*, 53(3), 515–563. https://doi.org/10.1257/jel.53.3.515

[4]. Akintoye, I. R., Adegbie, F. F., & Hakeem, M. (2021). Managerial efficiency and macroeconomic performance: Evidence from emerging economies. *Journal of Public Finance and Public Choice*, 36(2), 145–162.

[5]. Alesina, A., Favara, G., & Frassconi, F. (2019). The macroeconomic effects of fiscal consolidation. *Journal of Public Economics*, 174, 114–132. https://doi.org/10.1016/j.jpubeco.2019.03.009

[6]. Alharbi, W., & Alqahtani, M. (2022). Fiscal policy effectiveness and economic growth in emerging economies: A structural analysis. *Economic Change and Restructuring*, 55(3), 1421–1445. https://doi.org/10.1007/s10644-021-09362-8

[7]. Andrews, R., Boyne, G. A., & Walker, R. M. (2020). *The impact of management on administrative performance: Empirical evidence from public services*. Cambridge University Press.

[8]. Apedo-Amah, M. C., Davies, E., & Gunter, C. (2024). Bureaucratic efficiency and public sector performance in developing nations. *World Development*, 175, 106489. https://doi.org/10.1016/j.worlddev.2023.106489

[9]. Asongu, S. A., Nnanna, J., & Biekpe, N. (2021). Governance, the quality of institutions and economic growth in developing countries. *Research in International Business and Finance*, 55, Article 101328.

[10]. Bahl, R., Bird, R. M., & Wallace, S. (2022). *Public finance in developing countries: Decentralization, fiscal reform, and economic growth*. Edward Elgar Publishing.

[11]. Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.

[12]. Barro, R. J., & Sala-i-Martin, X. (2023). *Economic growth* (2nd ed.). MIT Press.

[13]. Besley, T., & Persson, T. (2013). Taxation and development. *Handbook of Public Economics*, 5, 51–110.

[14]. Bird, R. M. (2022). Changing fiscal horizons: Public finance in transition economies. *International Tax and Public Finance*, 29(2), 241–268. https://doi.org/10.1007/s10797-021-09680-3

[15]. Bird, R. M. (2022). *Tax policy and economic development*. Cambridge University Press.

[16]. Boushey, H., DeLong, J. B., & Steinbaum, M. (2021). *After Piketty: The agenda for economics and inequality*. Harvard University Press.

[17]. Chen, H., Wang, L., & Zhang, Y. (2025). Institutional quality, fiscal stability, and macroeconomic growth: A structural equation modeling approach. *Economic Modelling*, 142, 106–120. https://doi.org/10.1016/j.econmod.2024.106120

[18]. Dabla-Norris, E., Gradstein, M., & Inchauste, G. (2020). What drives tax compliance? A cross-country analysis of institutional determinants. *International Tax and Public Finance*, 27(3), 589–615.

[19]. Devarajan, S., Swaroop, V., & Zou, H. F. (1996). The composition of public expenditure and economic growth. *Journal of Monetary Economics*, 37(2–3), 313–344.

[20]. Dincer, I., & Kandil, M. (2024). The role of fiscal discipline in mitigating macroeconomic shocks: Cross-country empirical evidence. *Empirical Economics*, 66(2), 789–815. https://doi.org/10.1007/s00181-023-02480-y

[21]. Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2022). The regulation of entry. *Quarterly Journal of Economics*, 117(1), 1–37.

[22]. Gemmell, N., Kneller, R., & Sanz, I. (2016). Doing the best with what you have: The role of fiscal frameworks in economic growth. *European Journal of Political Economy*, 44, 112–130.

[23]. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.

[24]. Hassan, M., Zaidi, S. A., & Khan, S. (2023). Tax compliance and macroeconomic stability in emerging markets. *Journal of Economic Studies*, 50(4), 789–805.

[25]. Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Press.

[26]. Henseler, J., Hubona, G., & Ray, P. A. (2025). Evaluating model fit in partial least squares structural equation modeling: Current standards and future directions. *Journal of Business Research*, 188, 115120. https://doi.org/10.1016/j.jbusres.2024.115120

[27]. Hood, C., & Dixon, R. (2015). *A government that works better and costs less? Evaluating three decades of public management reform*. Oxford University Press.

[28]. International Monetary Fund [IMF]. (2025). *Fiscal monitor: Managing public finances in an uncertain global economy*. IMF Publication.

[29]. Kopits, G. (2023). Fiscal governance and economic resilience in the post-pandemic era. *Public Budgeting & Finance*, 43(1), 3–25. https://doi.org/10.1111/pbaf.12330

[30]. Le, T. H., Chang, Y., & Park, D. (2023). Tax compliance, institutional quality, and economic growth in developing countries. *Economic Modelling*, 118, Article 106102.

[31]. Mendoza, R., & Kim, J. (2025). Public administration reforms and macroeconomic stability: A comparative empirical study. *International Review of Administrative Sciences*, 91(1), 88–107. https://doi.org/10.1177/00208523241234567

[32]. Musgrave, R. A. (2008). *The theory of public finance: A study in public economy*. McGraw-Hill.

[33]. Nguyen, H. T., Pham, D. C., & Vu, T. A. (2024). The mediating role of fiscal stability in linking public governance to economic growth. *Public* Ostry, J. D., Berg, A., & Tsangarides, C. G. (2014). Redistribution, inequality, and growth. *IMF Staff Discussion Note*, SDN/14/02, International Monetary Fund.

[34]. Nguyen, T. P., Le, H. T., & Tran, D. K. (2024). Tax compliance, fiscal space, and sustainable economic growth in developing countries. *Journal of International Development*, 36(2), 620–645. https://doi.org/10.1002/jid.3812

[35]. Prasetyo, A. D., & Kholis, N. (2023). The transmission mechanism of tax compliance and administrative efficiency on economic growth. *Bulletin of Monetary Economics and Banking*, 26(Special Issue), 115–138. https://doi.org/10.21098/bemp.v26iS1.2054

[36]. Reinhart, C. M., & Rogoff, K. S. (2021). *This time is different: Eight centuries of financial folly*. Princeton University Press.

[37]. Romer, D., & Romer, C. H. (2017). The macroeconomic effects of tax changes: Estimates based on a new measure of fiscal shocks. *American Economic Review*, 100(3), 763–801.

[38]. Slemrod, J. (2019). Tax compliance and enforcement. *Journal of Economic Literature*, 57(4), 904–954.

[39]. Slemrod, J. (2023). Tax compliance and administration in the 2020s: Paradigm shifts and empirical evidence. *National Tax Journal*, 76(1), 185–210. https://doi.org/10.1086/723145

[40]. Tanzi, V., & Schuknecht, L. (2000). *Public spending in the 20th century: A global perspective*. Cambridge University Press.

[41]. World Bank. (2024). *Global economic prospects: Fiscal policies for sustainable growth*. World Bank Group.

[42]. Yilmaz, K., Demir, E., & Ozcan, B. (2023). Budgetary discipline, public debt thresholds, and macroeconomic performance. *Economic Systems*, 47(4), 101–118. https://doi.org/10.1016/j.ecosys.2023.101118