

Indonesia's Central Government Tax Revenue Dynamics Before and Since 2022: Growth, Composition, and the Tax-to-GDP Ratio

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Abstract

This study examined whether the growth in Indonesia's central government tax revenue since 2022 was accompanied by sustained improvements relative to nominal gross domestic product (GDP) and whether revenue increases were broadly distributed across tax categories. A quantitative descriptive-comparative approach was employed using official annual tax revenue and current-price GDP data for 2010–2025. The analysis compared three periods: the pre-pandemic baseline (2010–2019), the pandemic and initial recovery period (2020–2021), and the post-2021 period (2022–2025). The analytical indicators included annual revenue growth, tax-to-GDP ratios, tax category shares, descriptive tax buoyancy, and additive contributions to revenue growth. Endpoint and alternative-coverage sensitivity analyses were conducted to assess the robustness of the findings. Tax revenue increased by 31.44% in 2022, exceeding nominal GDP growth of 15.38%, with income tax contributing 19.48 percentage points to overall revenue growth. The tax-to-GDP ratio recovered from 8.32% in 2020 to 10.39% in 2022 but subsequently declined to 10.02% in 2025. The average ratio for 2022–2025 was 10.29%, remaining below the 2010–2019 average of 10.62%. Between 2022 and 2025, tax revenue increased by 17.34%, while nominal GDP expanded by 21.61%. In 2025, income tax and excise revenues declined despite an increase in aggregate tax revenue. The reported Other Taxes category contributed 4.06 percentage points to overall revenue growth of 3.35%, whereas excluding this category resulted in an alternative-coverage growth rate of –0.71%. These descriptive findings did not establish causal relationships between specific tax reforms and revenue performance. Instead, they highlighted the importance of reconciling tax component classifications and evaluating fiscal performance through aggregate revenue growth, revenue composition, and tax collection relative to GDP.

INTRODUCTION

Tax revenue plays a fundamental role in financing public services and determining the government's fiscal capacity. However, growth in nominal tax revenue, measured in Indonesian

rupiah, does not necessarily indicate an increase in the proportion of economic output collected through taxation. Tax revenue may increase even when nominal gross domestic product (GDP) grows at a faster rate. Furthermore, revenue growth may be concentrated in specific tax categories or driven by temporary payments rather than sustained improvements in tax collection. A comprehensive assessment of tax revenue performance therefore requires consideration of revenue growth, revenue composition, and the relationship between tax receipts and nominal GDP (Badan Pusat Statistik, 2024; Cornevin et al., 2023; Taxes, 2015).

Indonesia provides a relevant context for examining these relationships. Law No. 7 of 2021 concerning the Harmonization of Tax Regulations (Undang-Undang Harmonisasi Peraturan Perpajakan, UU HPP) introduced several tax policy changes that were implemented over successive years. The value-added tax (VAT) rate increased to 11% on April 1, 2022, while the Voluntary Disclosure Program (Program Pengungkapan Sukarela, PPS) operated from January through June 2022. Subsequent adjustments to tobacco excise tariffs took effect in 2023 and 2024, while revised VAT calculation provisions and the implementation of the Coretax tax administration system formed part of the fiscal and administrative context in 2025 (Directorate General of Taxes [DGT], n.d.-, 2022, 2025, n.d.-b; Ministry of Finance, 2022). Accordingly, 2022 represents a relevant analytical dividing point for examining changes in tax revenue performance, although Indonesia's broader tax reform process began before that year and continued thereafter (Sinaga et al., 2023a).

Previous studies examining tax revenue and economic activity, including those by (Fenochietto & Pessino, 2013a; Handoko, 2019a; Maryanti & Widayat, 2026a), provide a foundation for understanding changes in Indonesia's fiscal performance. Building on this literature, the present study focused on a more specific descriptive question: whether the recovery in nominal tax revenue beginning in 2022 was sustained relative to nominal GDP and whether revenue growth was distributed across major tax categories (Bank, 2025, 2026b, 2026a). The study contributed to the existing literature by integrating comparisons across distinct fiscal periods, additive decomposition of tax category contributions to aggregate revenue growth, and sensitivity analyses addressing the reported Other Taxes category within a consistent descriptive framework. These analytical procedures were particularly relevant because multiple tax policy and administrative changes occurred during overlapping periods, while the limited number of annual observations constrained the ability to attribute observed revenue changes causally to any individual reform (Fund, 2026a, 2026b; OECD, 2025b, 2025a, 2026).

METHOD

Design, sources, and measurement

This study employed a quantitative descriptive-comparative design supplemented by document-based policy mapping, using annual data from 2010 to 2025. Tax revenue data were obtained from Statistics Indonesia (Badan Pusat Statistik, BPS), specifically the Realisasi Pendapatan Negara (State Revenue Realization) table, covering total tax revenue (Penerimaan Perpajakan) and its reported components. Nominal gross domestic product (GDP) data were

obtained from the BPS PDB Menurut Lapangan Usaha Seri 2010 (GDP by Industry, 2010 Base Year) table, using annual current-price GDP values. All monetary figures were converted from billions to trillions of Indonesian rupiah by dividing the original values by 1,000. Calculations retained the precision of the source data, with rounding applied only when presenting the results (BPS, 2026a, 2026b).

The tax revenue measure encompassed central government domestic taxes and international trade taxes. Income tax included both oil and gas and non-oil and gas income tax revenues, while value-added tax (VAT) and luxury goods sales tax were treated as a combined category, consistent with the source classification. Excise revenue was analyzed separately. For aggregate decomposition, the remaining tax categories were grouped into a residual component calculated by subtracting income tax, VAT and luxury goods sales tax, and excise revenue from total tax revenue. This residual component included property-related taxes, international trade taxes, and other taxes and was distinguished from the separately reported Other Taxes (Pajak Lainnya) category.

The 2025 observations were analyzed using the published figures without assuming that they represented final audited values. The tax revenue source indicated an update dated August 28, 2026, while the BPS GDP release published in February 2026 reported Indonesia's nominal GDP for 2025 at Rp23,821.1 trillion, compared with the more precise downloaded figure of Rp23,821.1036 trillion (BPS, 2026c). Potential data revisions and classification changes were acknowledged as limitations. Missing or unreported values were retained as such rather than automatically assigned a value of zero. The residual grouping enabled the decomposition of aggregate tax revenue growth without imputing values for individual components with missing observations.

Table 1. Operational definitions and data coverage

Measure	Definition	Role
Total tax revenue	BPS central government tax revenue	Growth and ratio numerator
Income tax	Combined oil/gas and non-oil income tax	Category growth and contribution
VAT / luxury sales tax	Combined category reported by BPS	Category growth and contribution
Excise	BPS excise receipts	Category growth and contribution
Remaining categories	Total less the three categories above	Additive reconciliation
Nominal GDP	Annual national GDP at current prices, series 2010	Scale and growth comparator
Policy chronology	Selected official measures and implementation dates	Context, not causal treatment

Source: BPS (2026a, 2026b), author's calculations.

Periods and indicators

The baseline comprises 2010–2019, the pandemic and initial recovery interval comprises 2020–2021, and the focal implementation window comprises 2022–2025. The baseline is not a period without tax reforms. These are descriptive groupings, not treatment and control groups. The comparison is also repeated for 2022–2024 to show endpoint sensitivity. The 2010 observation

establishes the starting level; growth calculations begin in 2011. Therefore, baseline mean annual growth covers nine transitions, whereas the focal-window mean includes the 2021–2022 transition. Let T_t denote total tax revenue, T_{it} revenue from category i , and G_t nominal GDP. The indicators are:

Revenue growth: $gT_t = 100 \times (T_t / T_{t-1} - 1)$. (1)

Nominal GDP growth: $gG_t = 100 \times (G_t / G_{t-1} - 1)$. (2)

Tax-to-GDP ratio: $R_t = 100 \times T_t / G_t$. (3)

Category share: $S_{it} = 100 \times T_{it} / T_t$. (4)

Contribution to total growth: $C_{it} = 100 \times (T_{it} - T_{i,t-1}) / T_{t-1}$. (5)

Annual descriptive buoyancy: $B_t = gT_t / gG_t$. (6)

Category contributions in Eq. (5) are percentage points and sum to total growth when categories exhaust the total. Remaining categories are defined residually to preserve this identity. Eq. (6) is undefined when GDP growth is zero and sensitive to small denominators. A positive value above one during a joint contraction may indicate a disproportionately severe revenue decline, not improved mobilisation. Period ratios are arithmetic means of annual ratios; a separate GDP-weighted measure is calculated as $100 \times \text{sum}(T_t) / \text{sum}(G_t)$. Neither is presented as a statistically significant reform effect.

Worked calculations and replication

Appendix A presents numerical substitutions for the indicators in Eqs. (1)–(6), the period averages, and the alternative-coverage sensitivity calculation. All examples use trillion rupiah, retain the source precision in calculation, and round only the reported results. Category contributions are percentage points; annual buoyancy is a dimensionless descriptive growth ratio.

Policy mapping and analytical limits

Official DGT and Ministry of Finance documents are used to record selected policy dates and their relevant tax categories. The chronology is deliberately selective and does not assume that all measures have the same implementation date or affect every revenue component. The analysis uses no panel regression, ARDL-ECM, or causal before–after estimator. Sixteen annual observations, four focal-window years, overlapping policies, and the absence of an untreated comparator limit identification. The design therefore reports accounting evidence and contextual interpretations, without assigning observed revenue changes to the HPP law, Coretax, or any single policy.

The comparisons use published category definitions and retain the source's treatment of missing or unreported entries. Arithmetic period means are interpreted descriptively because the baseline and focal windows contain different numbers of observations. The reported 2025 Other Taxes movement is examined through reconciliation and an alternative-coverage calculation, not through an assumption about its underlying transaction type. The software used to process the data is not specified in the available research documentation; the formulas and worked calculations, rather than a claimed application, describe the reproducible procedure.

RESULT AND DISCUSSION

Revenue growth and the GDP-scaled trajectory

Table 2. Annual central government tax revenue and nominal GDP

Year	Tax revenue Rp trillion	Nominal GDP Rp trillion	Tax growth %	GDP growth %	Tax / GDP %
2010	723.31	6,864.13	—	—	10.54
2011	873.87	7,831.73	20.82	14.10	11.16
2012	980.52	8,615.70	12.20	10.01	11.38
2013	1,077.31	9,546.13	9.87	10.80	11.29
2014	1,146.87	10,569.71	6.46	10.72	10.85
2015	1,240.42	11,526.33	8.16	9.05	10.76
2016	1,284.97	12,401.73	3.59	7.59	10.36
2017	1,343.53	13,589.83	4.56	9.58	9.89
2018	1,518.79	14,838.76	13.04	9.19	10.24
2019	1,546.14	15,832.66	1.80	6.70	9.77
2020	1,285.14	15,443.35	-16.88	-2.46	8.32
2021	1,547.84	16,976.75	20.44	9.93	9.12
2022	2,034.55	19,588.46	31.44	15.38	10.39
2023	2,154.21	20,892.31	5.88	6.66	10.31
2024	2,309.86	22,138.99	7.23	5.97	10.43
2025	2,387.28	23,821.10	3.35	7.60	10.02

Source: BPS (2026a, 2026b), author's calculations.

Table 2 shows that nominal tax revenue increased from Rp723.31 trillion in 2010 to Rp2,387.28 trillion in 2025. Nevertheless, the ratio to nominal GDP declined from 10.54% to 10.02%, a decrease of 0.52 percentage points. Before the pandemic, the annual ratio reached 11.38% in 2012 and fell to 9.77% in 2019. The sample therefore already contained variation and a weakening ratio before the focal policy window.

The ratio fell to 8.32% in 2020, when revenue contracted by 16.88% and nominal GDP by 2.46%. It recovered to 9.12% in 2021 and 10.39% in 2022. Revenue growth of 31.44% in 2022 exceeded nominal GDP growth of 15.38%, producing annual descriptive buoyancy of 2.04. This is a strong annual rebound, but it is not an estimated long-run coefficient or proof that reform caused the increase.

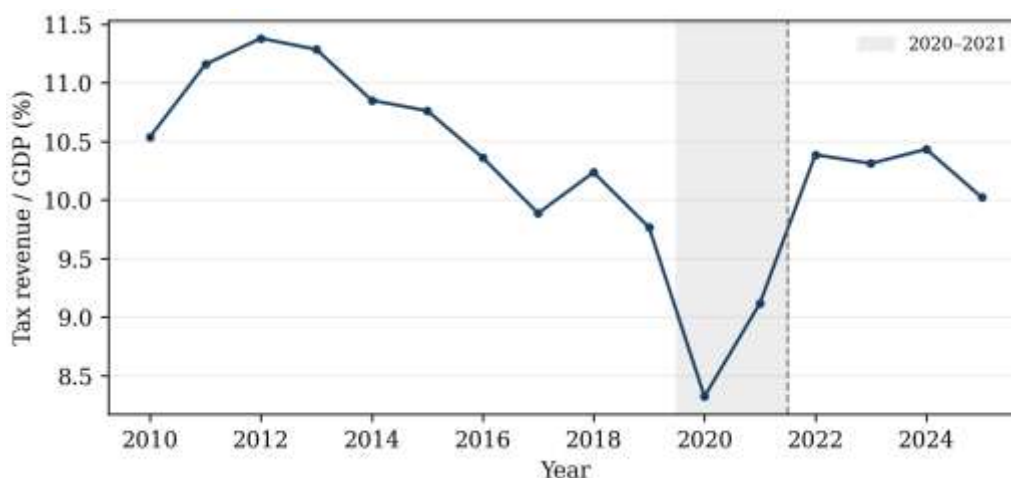


Figure 1. Central government tax-to-GDP ratio, 2010–2025

Source: BPS (2026a, 2026b), author's calculations.

Figure 1 makes the distinction between recovery and persistent improvement visible. After 2022, revenue grew by 5.88%, 7.23%, and 3.35% in 2023, 2024, and 2025, respectively. Corresponding annual descriptive buoyancies were 0.88, 1.21, and 0.44. The ratio increased slightly in 2024 before declining by approximately 0.41 percentage points in 2025. Between the 2022 and 2025 endpoints, tax revenue increased by 17.34%, while nominal GDP increased by 21.61%.

Table 3. Descriptive comparison across periods

Period	Annual observations	Mean tax / GDP %	Mean tax growth %	Mean GDP growth %
2010–2019	10 levels / 9 changes	10.62	8.94	9.75
2020–2021	2 levels / 2 changes	8.72	1.78	3.74
2022–2025	4 levels / 4 changes	10.29	11.98	8.90
2022–2024	3 levels / 3 changes	10.38	14.85	9.34

Source: BPS (2026a, 2026b), author's calculations. Means are arithmetic; each change uses the preceding year as its base.

Table 3 shows that the focal-window mean ratio was 10.29%, above the pandemic interval but below the 10.62% baseline mean. This comparison is descriptive and does not control for differences in macroeconomic conditions across periods. GDP-weighted ratios yield the same ordering: 10.51% for 2010–2019, 8.74% for 2020–2021, and 10.28% for 2022–2025. The conclusion is therefore not dependent on the choice between these two ratio summaries.

The high focal-window mean growth rate is strongly influenced by the 2022 rebound. Restricting growth observations to 2023–2025 reduces mean tax growth to 5.49%, below mean nominal GDP growth of 6.74%. Excluding 2025 gives a 2022–2024 mean ratio of 10.38%, which remains below the baseline mean. These comparisons support the narrower conclusion that recovery in GDP-scaled collection did not establish a continuously rising ratio.

Composition and additive growth contributions

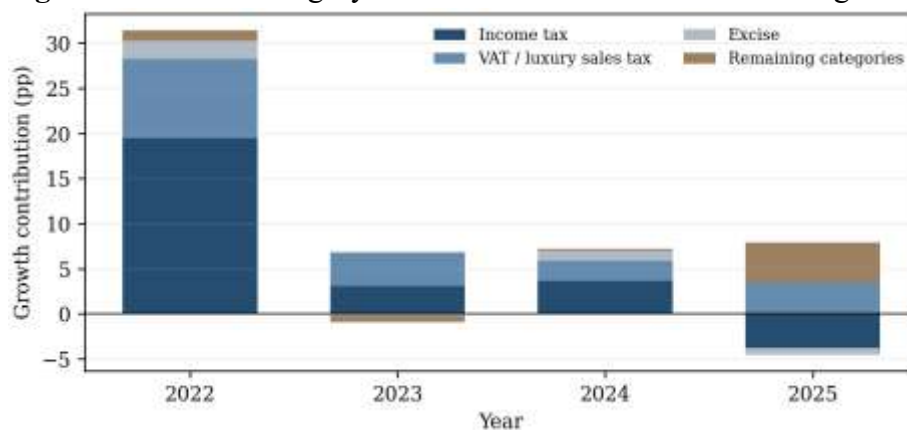
Table 4. Category shares and contributions during 2022–2025

Year	Category	Share of total %	Contribution to total growth, pp
2022	Income tax	49.06	19.48
2022	VAT / luxury sales tax	33.80	8.77
2022	Excise	11.15	2.03
2022	Remaining categories	5.99	1.17
2023	Income tax	49.26	3.10
2023	VAT / luxury sales tax	35.45	3.74
2023	Excise	10.30	-0.25
2023	Remaining categories	4.99	-0.71
2024	Income tax	49.34	3.65
2024	VAT / luxury sales tax	35.13	2.22
2024	Excise	10.65	1.12
2024	Remaining categories	4.88	0.24
2025	Income tax	44.05	-3.82
2025	VAT / luxury sales tax	37.32	3.45
2025	Excise	9.58	-0.75
2025	Remaining categories	9.05	4.47

Source: BPS (2026a), author's calculations. pp = percentage points. Remaining categories are a residual aggregate, not the source row "Other Taxes".

Income tax accounted for 19.48 percentage points of the 31.44% increase in 2022, approximately 62% of the net increase. VAT/luxury sales tax contributed 8.77 percentage points, excise 2.03, and remaining categories 1.17. The larger income-tax contribution means that the aggregate rebound cannot be interpreted as a VAT-rate result alone. Contributions combine changes in economic bases, rates, collection, payment timing, and other influences; the decomposition does not separate them.

Figure 2. Additive category contributions to annual tax revenue growth



Source: BPS (2026a, 2026b), author's calculations.

In 2023, VAT/luxury sales tax contributed 3.74 percentage points and income tax 3.10, while excise and remaining categories made negative net contributions. In 2024, all four compact groups contributed positively. The source's income-tax share remained around 49% during 2022–2024, but fell to 44.05% in 2025. The VAT/luxury sales tax share rose from 33.80% in 2022 to 37.32% in 2025. This shift helps explain why changes in the total conceal different category trajectories.

The 2025 pattern is particularly important. Income tax declined by 7.73%, contributing –3.82 percentage points to total growth, while excise contributed –0.75 percentage points. VAT/luxury sales tax increased by 9.81%, contributing 3.45 percentage points. Remaining categories contributed 4.47 percentage points. Thus, a positive total growth rate of 3.35% coexisted with contractions in two major categories.

The published Other Taxes component and sensitivity

Table 5. Reconciliation of remaining categories in 2024 and 2025

Source category	2024 Rp trillion	2025 Rp trillion	2025 growth contribution, pp
Land and building tax	27.1822	30.0833	0.13
Other Taxes (source row)	10.5490	104.2304	4.06
Import duties	57.3725	53.7656	–0.16
Export taxes	17.5280	27.8925	0.45
Compact remaining aggregate	112.6317	215.9717	4.47

Source: BPS (2026a), author's calculations. BPHTB is shown as a dash in the 2024 source and zero in 2025; no numerical change is imputed. Small differences reflect source rounding.

Table 5 identifies the main component behind the increase in the compact remaining group. The source row “Other Taxes” rose from Rp10.5490 trillion in 2024 to Rp104.2304 trillion in 2025. Its contribution of 4.06 percentage points exceeded total growth of 3.35%. This is an observed feature of the supplied BPS publication, not an inferred explanation of what transactions generated the receipts. The available table does not establish whether the movement reflects exceptional receipts, classification changes, or other factors.

A sensitivity calculation removes the source row “Other Taxes” from both 2024 and 2025 totals, rather than only subtracting the latest-year amount. On that explicitly restricted coverage, 2025 revenue growth becomes –0.71%. The corresponding 2025 revenue-to-GDP ratio is 9.58%. These are alternative-coverage indicators, not corrected official totals. They show that the interpretation of the positive 2025 total is sensitive to a single component and reinforce the need for explanatory metadata before attributing that movement to administrative reform.

Policy chronology and interpretation

Table 6. Selected policy and administrative milestones

Timing	Measure and official source	Interpretive relevance
2021 / tax year 2022	UU HPP; corporate rate retained at 22% for 2022 and personal income-tax schedule revised (DGT, 2021)	Income-tax rules differ across taxpayers; no uniform revenue effect assumed.
Jan–Jun 2022	Voluntary disclosure programme (DGT, n.d.-a)	Potential non-recurring income-tax payments; aggregate tables do not isolate them.

Timing	Measure and official source	Interpretive relevance
1 Apr 2022	VAT rate became 11% (DGT, 2022)	2022 has only partial-year exposure; subsequent years are not identical policy windows.
2023–2024	Tobacco excise schedules under PMK 191/PMK.010/2022 (Ministry of Finance, 2022)	Rate schedules apply to tobacco categories, not uniformly to all excise.
Jan–Feb 2025	PMK 131/2024 and PMK 11/2025 VAT calculation arrangements (Ministry of Finance, 2024; DGT, 2025a)	Statutory rates and alternative bases must be considered together.
Jan 2025 onward	Coretax DJP implementation (DGT, n.d.-b)	Administrative milestone; one annual observation cannot identify its effect.

Source: official DGT and Ministry of Finance documents listed in References. This is a selective chronology, not an exhaustive reform inventory.

Table 6 provides a mechanism-based context for the revenue movements. The voluntary disclosure programme and VAT adjustment overlapped with recovery in 2022. The income-tax contribution was substantially larger than the VAT contribution that year, but this does not identify how much arose from disclosure payments or economic conditions. The chronology helps prevent a single-date interpretation of the HPP package, while the accounting results show where receipts changed.

For 2025, a statutory VAT rate of 12% should not be treated as a uniform increase in the effective burden on every transaction. The official VAT arrangements include alternative taxable bases, including 11/12 calculations for specified cases (DGT, 2025; Ministry of Finance, 2024). Likewise, Coretax implementation is a documented administrative change, but the dataset contains no direct measure of system use, compliance, refunds, or processing performance. The rise in VAT receipts and the increase in the source “Other Taxes” row cannot be assigned to Coretax on the basis of temporal coincidence.

Implications and limitations

The findings suggest that fiscal monitoring should distinguish nominal collection, the composition of collection, and collection relative to the nominal economy. In this dataset, the 2022 rebound and subsequent nominal gains did not translate into a continuously increasing central government tax-to-GDP ratio. A monitoring framework that reports category contributions alongside the total would make it easier to distinguish broad-based growth from an increase concentrated in one accounting item. Publishing explanations of unusually large category movements would also strengthen reproducibility (Fenochietto & Pessino, 2013b; Handoko, 2019b; Maryanti & Widayat, 2026b; Peraturan Menteri Keuangan Nomor 169/PMK.010/2015 Tentang Penentuan Besarnya Perbandingan Antara Utang Dan Modal Perusahaan Untuk Keperluan Penghitungan Pajak Penghasilan, 2015; Sinaga et al., 2023b).

The study cannot determine the causal effectiveness of reform or whether a particular ratio represents optimal taxation. Four focal-window years provide limited evidence about persistence, and annual aggregation obscures within-year policy exposure and payment timing. The revenue classification is broad; PPh combines several bases, and VAT is combined with luxury sales tax. Commodity prices, refunds, compliance, inflation, and sectoral activity are not separately

measured. The 2025 publication is retained transparently with endpoint and category sensitivity checks. Future work could reconcile fiscal-table metadata with audited reporting, extend comparable history, and use quarterly or taxpayer-level data to identify specific mechanisms.

CONCLUSION

Indonesia's central government tax revenue increased substantially during the 2022 recovery, with income tax accounting for the largest share of the net increase. Value-added tax (VAT) and luxury goods sales tax subsequently represented a growing proportion of total tax revenue, while income tax and excise revenues declined in the published 2025 data. Although the tax-to-GDP ratio recovered from its pandemic-related low, the recovery was not sustained throughout the observation period. The ratio reached 10.39% in 2022 before declining to 10.02% in 2025. Furthermore, the average tax-to-GDP ratio for 2022–2025 remained below the 2010–2019 baseline average, even when 2025 was excluded from the comparison. These findings indicated that the recovery in nominal tax revenue was not accompanied by a sustained increase in tax collection relative to the size of the economy.

The revenue decomposition further demonstrated that the separately reported Other Taxes category played a significant role in interpreting the 2025 results. Excluding this category consistently from both comparison years reversed the direction of aggregate revenue growth, indicating that the reported increase was sensitive to the composition of tax revenue. Although this sensitivity did not undermine the validity of the published aggregate figures, it limited the extent to which the results could be interpreted as evidence of broadly distributed improvements across tax categories. The chronology of tax reforms provided relevant institutional context; however, the descriptive evidence did not establish causal relationships between the observed revenue changes and the Harmonization of Tax Regulations Law (Undang-Undang Harmonisasi Peraturan Perpajakan, UU HPP), VAT adjustments, excise tariff changes, or the implementation of the Coretax tax administration system. This study contributed a transparent descriptive assessment of tax revenue growth, composition, and performance relative to nominal GDP, supported by component reconciliation and sensitivity analyses. The findings suggested that evaluations of tax reform outcomes should integrate aggregate revenue indicators, category-level trends, and verified implementation evidence before drawing conclusions about sustained improvements in tax collection performance.

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