

ReadMe and Data Availability Statement: *Tax Policy Review in Indonesia*

Instructions on data sources and data construction for all the paper's charts are contained in this document. Note that programming code is used for only one chart in the paper (Figure 4.6).

Section 1:

Figure 1.1: Changes in domestic tax revenue composition

- Source: World Bank staff calculations using IMF WoRLD and Indonesian Ministry of Finance (MoF) data. The IMF WoRLD (World Revenue Longitudinal Data) is available at <https://www.imf.org/en/Topics/fiscal-policies/world-revenue-longitudinal-database>
 - o Download Data (Stata) → “world-imf2024-v1.dta”
 - o However, for the writing of *Tax Policy Review in Indonesia*, authors used the vintage version of this database which is no longer provided on the IMF website. The vintage version is called “IMF WoRLD 1990-2021 (wide).dta” and included in this reproducibility package. From this vintage dataset:
 1. Select variables: *indv, corp, vat, excise, trade, other_rev*
 2. Select years: 2011 – 2019
 3. Select Indonesia, UMIC (Upper Middle-Income Country), and ASEAN countries as comparator peers. (See table below)
 4. Take the average value of the following variables between 1991-2019 for Indonesia; and between 2011-2019 for UMIC and ASEAN countries. The following variables are in % of GDP. Then convert these values (tax components) into % of total tax revenue for Indonesia, UMIC, and ASEAN.
 5. **Details of calculations are in the attached “Fig 1.1 calc.xlsx”**

<i>What authors use in the paper, with the vintage database</i>		<i>FYI, what's available on IMF website</i>
Variable name in IMF WoRLD 1990-2021 (wide).dta	Variable name in Fig 1.1	Variable name in world-imf2024-v1.dta
<i>indv</i>	PIT	<i>TaxIncl</i>
<i>corp</i>	CIT	<i>TaxIncC</i>
<i>vat</i>	VAT	<i>TaxSalG</i>
<i>excise</i>	Excises	<i>TaxSalExc</i>
<i>trade</i>	Trade	<i>TaxTra</i>
tax minus all variables above	Other	<i>TaxRev</i> minus all variables above

Note: List of ASEAN countries:

1. Brunei Darussalam
2. Cambodia
3. Indonesia
4. Malaysia
5. Myanmar
6. Philippines
7. Singapore
8. Thailand
9. Vietnam

Note: List of UMIC countries

Albania	Indonesia
Argentina	Jamaica
Armenia	Jordan
Azerbaijan	Kazakhstan
Belarus	Malaysia
Belize	Mauritius
Bosnia and Herzegovina	Mexico
Brazil	Moldova
China	Namibia
Colombia	North Macedonia
Costa Rica	Paraguay
Dominica	Peru
Dominican Republic	Serbia
Equatorial Guinea	South Africa
Fiji	St. Lucia
Georgia	St. Vincent and the Grenadines
Guatemala	Suriname
Guyana	Thailand

Section 2:

Figure 2.1. Evolution of Indonesia's corporate tax rates

- This is based on historic records of business tax rates in Indonesia.
- Tax rates for 1981 are from:
 - o Gillis, M. 1989. "Comprehensive Tax Reform: The Indonesian Experience, 1981-1988." In *Tax Reform in Developing Countries*, edited by M. Gillis, 79-114. Duke University Press.
- Tax rates for 1984 are from:
 - o Law 7 of 1983.
 - o Gillis, M. 1985. "Micro and Macroeconomics of Tax Reform: Indonesia." *Journal of Development Economics* 19 (3): 221-254.
- Tax rates for 1994:
 - o Law 10 of 1994.
 - o Dartanto, T. 2012. *The 2008 Corporate Income Tax Reform and Its Contribution to Poverty Reduction in Indonesia*. Working Paper in Economics and Business. Volume II No.3/2012. Department of Economics, University of Indonesia.
- Tax rates for 2000:
 - o Law 17 of 2000.
 - o Dartanto, T. 2012. *The 2008 Corporate Income Tax Reform and Its Contribution to Poverty Reduction in Indonesia*. Working Paper in Economics and Business. Volume II No.3/2012. Department of Economics, University of Indonesia.
- Tax rates for 2009 and 2010:

- Law 36 of 2008. Article 17 for statutory rates.
 - <https://peraturan.bpk.go.id/Details/39704/uu-no-36-tahun-2008>
- Dartanto, T. 2012. The 2008 Corporate Income Tax Reform and Its Contribution to Poverty Reduction in Indonesia. Working Paper in Economics and Business. Volume II No.3/2012. Department of Economics, University of Indonesia.
- Law 36 of 2008. Article 31E for MSME reduced rate.
- Tax rates for 2020:
 - Law 2 of 2020. Article 5 for statutory rate.
 - <https://peraturan.bpk.go.id/Details/137323/uu-no-2-tahun-2020>
 - Law 36 of 2008, Article 31E for MSME reduced rate.

Figure 2.2. Statutory CIT rate by country

- Singapore, Brunei, Thailand, Vietnam, Indonesia, Malaysia, Philippines:
 - o OECD. 2023. Corporate Tax Statistics: Statutory corporate income tax rates, 2023. <https://doi.org/10.1787/983f251a-en>
- Cambodia, Lao PDR, Myanmar:
 - o PricewaterhouseCoopers. 2023. Corporate income tax (CIT) rates, Headline rates for WWTS territories. Worldwide Tax Summaries. Retrieved June 2023, from <https://taxsummaries.pwc.com/quick-charts/corporate-income-tax-cit-rates>
- ASEAN average: The simple average of the values for the ASEAN member states.

Figure 2.3. Corporate income taxes and other taxes

- OECD. 2023. Data warehouse. OECD.Stat (database). <https://doi.org/10.1787/data-00900-en>. Accessed June 2023.
 - o Topic: Global tax revenues
 - o Institutional sector: Central government
 - o Tax category: Taxes on income, profits and capital gains of corporations
 - o Unit of measure: Percentage of GDP
- Corporate income tax as a % of GDP, Central Government, taken directly from data set.
- Other taxes as a % of GDP taken as difference between CIT % and Total Taxes % from data set.

Figure 2.4. Corporate income tax collections in ASEAN

- OECD. 2023. Data warehouse. OECD.Stat (database). <https://doi.org/10.1787/data-00900-en>. Accessed June 2023.
 - o Topic: Global tax revenues
 - o Institutional sector: Central government
 - o Tax category: Taxes on income, profits and capital gains of corporations
 - o Unit of measure: Percentage of GDP

Figure 2.5. CIT efficiency by country

- CIT efficiency is calculated as the CIT revenue-to-GDP ratio divided by the statutory CIT rate and the share of gross operating surplus in total value added at basic prices.
- Current price GDP is from World Development Indicators
- CIT revenue data from:
 - o OECD. 2023. Data warehouse. OECD.Stat (database). <https://doi.org/10.1787/data-00900-en>. Accessed June 2023.
 - Topic: Global tax revenues
 - Institutional sector: Central government
 - Tax category: Taxes on income, profits and capital gains of corporations
 - Unit of measure: Percentage of GDP
- Gross Operating Surplus:
 - o Singapore: <https://tablebuilder.singstat.gov.sg/>
 - GVA: [Production Account At Current Prices](#), 2015
 - GOS: [Gross Operating Surplus By Industry At Current Prices](#), 2015

- Malaysia:
 - GVA: WDI, GVA at basic prices (current LCU), 2019
 - GOS: [GOS by Kind of Economic Activity at Current Prices](#), 2019
- Indonesia:
 - GVA: WDI, GVA at basic prices (current LCU), 2016
 - GOS: [Tabel Input-Output Indonesia Transaksi Total Atas Dasar Harga Pembeli \(17 Produk\)](#), 2016 (Juta Rupiah)
- Philippines:
 - GVA: [Consolidated Accounts and Income and Outlay Accounts of the Philippines](#), 2018
 - Calculated as GDP minus (i) taxes on production and on imports, plus (ii) subsidies.
 - GOS: [Consolidated Accounts and Income and Outlay Accounts of the Philippines](#), 2018
- Thailand:
 - GVA: [VALUE ADDED, GROSS, at basic prices](#), 2015
 - GOS: [OPERATING SURPLUS, GROSS](#), 2015

Table 2.1. Deemed net profit rates, effective tax rates, and final tax rates on gross revenues

- Deloitte. 2022. Indonesia Tax Guide 2022-2023.
- <https://www2.deloitte.com/id/en/pages/tax/articles/indonesian-tax-guide.html>

Figure 2.6. Duration of Indonesia's CIT holidays

- OECD. 2020b. *OECD Investment Policy Reviews: Indonesia 2020*. Chapter 6: Investment promotion and facilitation in Indonesia. Accessible here: https://www.oecd.org/en/publications/oecd-investment-policy-reviews-indonesia-2020_b56512da-en/full-report/component-9.html#section-d1e17417

Figure 2.7 Duration of tax holidays in ASEAN

- Brunei: <http://www.mpri.gov.bn/SitePages/Pioneer%20Service%20Companies.aspx>
- Cambodia: <https://taxsummaries.pwc.com/cambodia/corporate/tax-credits-and-incentives>
- Indonesia: <https://taxsummaries.pwc.com/indonesia/corporate/tax-credits-and-incentives>
- Lao PDR: <https://taxsummaries.pwc.com/lao-pdr/corporate/tax-credits-and-incentives>
- Malaysia: <https://taxsummaries.pwc.com/malaysia/corporate/tax-credits-and-incentives>
- Myanmar: <https://taxsummaries.pwc.com/myanmar/corporate/tax-credits-and-incentives>
- Philippines: <https://taxsummaries.pwc.com/philippines/corporate/tax-credits-and-incentives>
- Singapore: <https://taxsummaries.pwc.com/singapore/corporate/tax-credits-and-incentives>
- Thailand: <https://taxsummaries.pwc.com/thailand/corporate/tax-credits-and-incentives>
- Vietnam: <https://taxsummaries.pwc.com/vietnam/corporate/tax-credits-and-incentives>

Figure 2.8. Indonesia's income tax expenditure

- Global Tax Expenditures Database (1.3.0) [Data set]. Zenodo.
<https://doi.org/10.5281/zenodo.12585656>
- Tax expenditure provisions are coded as follows:
 - Tax Holidays and Allowances for Investments: Tax expenditure provisions 46-52
 - Reduced CIT Rate for Small Businesses: Tax expenditure provision 57
 - Reduced CIT Rate for Public Companies: Tax expenditure provision 58
 - Alternative Final Tax: Tax expenditure provision 59
 - Social Security Contribution Deduction: Tax expenditure provision 72
 - Other Income Tax Expenditures: Tax expenditure provisions 53-56, 60-71, 73-104, 139.
- Download country dataset for Indonesia at: [GTED Country Profile | GTED](#)
- Sum up data in tab "RevenueForegone" in column titled "RF % of GDP", using the above coding for relevant tax expenditure measures.

Table 2.2. Registered corporate taxpayers versus filing corporate taxpayers

- Annual reports of the Directorate General of Taxes, 2019-2021:
- <https://pajak.go.id/id/tahunan-page>

Section 3:

Figure 3.1. Distribution of average net profit margins across 94 sectors in Ems

- Damodaran, A. 2023. "Corporate finance datasets." Last updated in January 2023. <https://pages.stern.nyu.edu/~adamodar/pc/archives/marginemerg22.xls>
- Simple histogram created using data from column titled: 'Pre-tax, Pre-stock compensation Operating Margin'

Table 3.1. Reduced CIT rates for smaller firms in Southeast Asia

- Sources of tax rates:
 - o Brunei: <https://business.mofe.gov.bn/SitePages/Paying%20Taxes.aspx>
 - Rate for existing companies, small and medium size. Two tiers, with first tier charged at 25% of statutory rate of 18.5%, and second tier charged at 50% of statutory rate.
 - o Indonesia: <https://peraturan.bpk.go.id/Details/39704/uu-no-36-tahun-2008>
 - Tax rates as outlined in the paper. 11% on the first IDR 4.8 billion, assuming a profit margin of 2% to 20%, for firms with total turnover no higher than IDR 50 billion. Thus, to calculate applicable income ranges, convert IDR 4.8B to USD, then apply 2% and 20% rate.
 - o Malaysia: <https://www.hasil.gov.my/en/company/tax-rate-of-company/>
 - o Philippines: <https://taxsummaries.pwc.com/philippines/corporate/taxes-on-corporate-income>
 - o Singapore: <https://www.iras.gov.sg/taxes/corporate-income-tax/basics-of-corporate-income-tax/corporate-income-tax-rate-rebates-and-tax-exemption-schemes>
 - Tax rates based on the (i) tax exemption scheme for new start-up companies, and (ii) partial tax exemption scheme for companies.
 - o Thailand: <https://taxsummaries.pwc.com/thailand/corporate/taxes-on-corporate-income>
- Exchange rates: Uses average exchange rate for May 2023, based on data from: <https://www.ofx.com/en-hk/forex-news/historical-exchange-rates/monthly-average-rates/>
- GDP per capita: Uses Current Price USD GDP per capita for 2022, based on data from World Development Indicators.
- **"Reduced CIT rate"** is the applicable concessionary CIT % rate. Thus, if the statutory rate is 18.5% (e.g. Brunei), but small firms only have to pay 25% of the rate, then we arrive at $25\% \times 18.5\% = 4.625\%$.
- **"Applicable taxable income (US\$)"** takes the applicable LCU-denominated taxable income thresholds that correspond to concessional rates listed in "Reduced CIT rate", and converts them to US\$, using the May 2023 LCU to US\$ exchange rate. Values rounded to the nearest US\$1,000.
- **"Eligibility Threshold (US\$)"** lists any other eligibility conditions and, wherever they are denominated in LCU, converts them to US\$ using the May 2023 LCU to US\$ exchange rate.
- **"Applicable income versus GDP per capita"** divides the values in "Applicable taxable income (US\$)" by the 2022 Current Price USD GDP per capita for the country.

Section 4:

Figure 4.1: Statutory standard VAT rates

- Source: IMF TPAF (Tax Policy Assessment Framework)
https://www.imf.org/external/np/fad/tpaf/files/VAT_historic_rates.xlsx
- It is a box and whisker plot, which shows the VAT rate distribution of worldwide countries based on a five-number summary: minimum, first quartile (Q1), median, third quartile (Q3), and maximum. We grouped countries by regions and income classifications.
- Year selection: 2020, except Indonesia which refers to year 2022.
- Region and income classifications (**for details, please see the attached “Charts - Tax policy review.xlsx”, tab 4.1**). World = all countries, year 2020. The remainder of the country groups are in the table below:

Singapore	ASEAN
Thailand	ASEAN
Cambodia	ASEAN
Lao PDR	ASEAN
Malaysia	ASEAN
Vietnam	ASEAN
Indonesia	ASEAN
Philippines	ASEAN
Armenia	Asia
Azerbaijan	Asia
Cambodia	Asia
China (People's Rep.)	Asia
Georgia	Asia
India	Asia
Indonesia	Asia
Japan	Asia
Kazakhstan	Asia
Korea (Rep.)	Asia
Kyrgyzstan	Asia
Lao PDR	Asia
Malaysia	Asia
Maldives	Asia
Mongolia	Asia
Nepal	Asia
Pakistan	Asia
Philippines	Asia
Singapore	Asia
Sri Lanka	Asia
Tajikistan	Asia
Thailand	Asia

Albania	UMICs
Algeria	UMICs
Angola	UMICs
Azerbaijan	UMICs
Belarus	UMICs
Belize	UMICs
Bosnia & Herzegovina	UMICs
Botswana	UMICs
Brazil	UMICs
Bulgaria	UMICs
China (People's Rep.)	UMICs
Colombia	UMICs
Costa Rica	UMICs
Dominica	UMICs
Dominican Republic	UMICs
Ecuador	UMICs
Fiji	UMICs
Gabon	UMICs
Grenada	UMICs
Iran	UMICs
Jamaica	UMICs
Jordan	UMICs
Kazakhstan	UMICs
Lebanon	UMICs
Malaysia	UMICs
Maldives	UMICs
Mauritius	UMICs
Mexico	UMICs
Mongolia	UMICs
Montenegro	UMICs

Antigua and Barbuda	High income
Argentina	High income
Aruba	High income
Australia	High income
Austria	High income
Bahamas, The	High income
Bahrain	High income
Barbados	High income
Belgium	High income
Canada	High income
Chile	High income
Croatia	High income
Cyprus	High income
Czech Republic	High income
Denmark	High income
Equatorial Guinea	High income
Estonia	High income
Finland	High income
France	High income
Germany	High income
Greece	High income
Hungary	High income
Iceland	High income
Ireland	High income
Isle of Man	High income
Israel	High income
Italy	High income
Japan	High income
Korea (Rep.)	High income
Latvia	High income

Turkey	Asia
Turkmenistan	Asia
Uzbekistan	Asia
Vietnam	Asia
Armenia	LMICs
Bangladesh	LMICs
Bolivia	LMICs
Cameroon	LMICs
Cape Verde	LMICs
Congo (Rep.)	LMICs
Cote d'Ivoire	LMICs
Djibouti	LMICs
Egypt	LMICs
El Salvador	LMICs
Eswatini	LMICs
Georgia	LMICs
Ghana	LMICs
Guatemala	LMICs
Guyana	LMICs
Honduras	LMICs
India	LMICs
Indonesia	LMICs
Kenya	LMICs
Kiribati	LMICs
Kosovo	LMICs
Kyrgyzstan	LMICs
Lao PDR	LMICs
Lesotho	LMICs
Mauritania	LMICs
Moldova	LMICs
Morocco	LMICs
Nicaragua	LMICs
Nigeria	LMICs
Pakistan	LMICs
Papua New Guinea	LMICs
Philippines	LMICs
Samoa	LMICs
Senegal	LMICs
Sri Lanka	LMICs
Sudan	LMICs
Tajikistan	LMICs

Namibia	UMICs
North Macedonia	UMICs
Panama	UMICs
Paraguay	UMICs
Peru	UMICs
Romania	UMICs
Serbia	UMICs
South Africa	UMICs
St. Lucia	UMICs
St. Vincent & the Grenadines	UMICs
Thailand	UMICs
Tunisia	UMICs
Turkey	UMICs
Turkmenistan	UMICs

Liechtenstein	High income
Lithuania	High income
Luxembourg	High income
Malta	High income
Netherlands	High income
New Zealand	High income
Norway	High income
Poland	High income
Portugal	High income
Russia	High income
Saudi Arabia	High income
Seychelles	High income
Singapore	High income
Slovak Republic	High income
Slovenia	High income
Spain	High income
St. Kitts and Nevis	High income
Sweden	High income
Switzerland	High income
Trinidad & Tobago	High income
United Arab Emirates	High income
United Kingdom	High income
Uruguay	High income
Venezuela	High income

Ukraine	LMICs
Uzbekistan	LMICs
Vanuatu	LMICs
Vietnam	LMICs
Zambia	LMICs

Figure 4.2: VAT revenue of LMICs

- Source: IMF WoRLD (World Revenue Longitudinal Data) <https://data.imf.org/?sk=77413f1d-1525-450a-a23a-47aeed40fe78>

Figure 4.3: C-efficiency and VAT revenue to GDP ratio

- Source: Each country's national account data (accessed through CEIC). CEIC is a comprehensive database that curates economic indicators from various countries. Access to CEIC requires a paid data subscription <https://insights.ceicdata.com/login>

Figure 4.4: Comparison of VAT thresholds

- Source: Each country's national account data (accessed through CEIC), and IMF TPAF

Figure 4.5: Estimated excess firms bunching at VAT threshold

- Source: Saputro, H. 2020. *How Do Small Taxpayers Respond to Tax Simplification: Evidence from the Indonesian Turnover Tax Reform*. Available at https://nta.confex.com/nta/2020/mediafile/ExtendedAbstract/Paper3934/SME_Himawan_111720.pdf
- Figure 4.5 is an outright copy-paste from Saputro (2020), specifically Figure B1-Appendix B in this paper. We do not have access to its underlying data

Figure 4.6: Firm distribution vis-à-vis the VAT threshold

- Source: Worker and Household Enterprise Survey / WHES (World Bank, 2023)
- WHES is conducted by Poverty GP in World Bank Indonesia Country Office to capture the socio-economic information of household enterprise and worker in Indonesia. WHES is a nationally representative survey, conducted in December 2023. It sampled 5,056 households and 17,445 individuals across the country, using a stratified two stage cluster sampling.
- WHES is an internal dataset, owned by the Poverty GP in World Bank Indonesia Country Office. The team does not intend to make the survey raw data publicly available. However, for the verification purpose, raw data is included in the reproducibility package.

Figure 4.7: VAT payment relative incidence by consumption decile

- Source: Indonesia Poverty Assessment (World Bank, 2023), available at <https://www.worldbank.org/en/country/indonesia/publication/indonesia-poverty-assessment> (Figure 3.31 in this report)

Figure 4.8: Consumption of VAT-exempt goods & services, by consumption decile

- Source: Indonesia Poverty Assessment (World Bank, 2023), available at <https://www.worldbank.org/en/country/indonesia/publication/indonesia-poverty-assessment> (Figure 3.32 in this report)

Section 5:

Table 5.1.

- All numbers are based on: Deloitte. 2022. Indonesia Tax Guide 2022-2023.
- <https://www2.deloitte.com/id/en/pages/tax/articles/indonesian-tax-guide.html>
- See pages 22, 62-63. Rate for medium-sized businesses is calculated as 50% of the statutory rate of 22%, as per explanation on page 22 of source, and as already discussed in this paper.

Appendices:

Figure 5A.1: VAT revenue to GDP and VAT rate hikes in Argentina (1990-1997)

- Source: OECD, available at [https://data-explorer.oecd.org/vis?tenant=archive&df\[ds\]=DisseminateArchiveDMZ&df\[id\]=DF_REVARG&df\[ag\]=OECD&dq=.&lom=LASTNPERIODS&lo=5&to\[TIME_PERIOD\]=false](https://data-explorer.oecd.org/vis?tenant=archive&df[ds]=DisseminateArchiveDMZ&df[id]=DF_REVARG&df[ag]=OECD&dq=.&lom=LASTNPERIODS&lo=5&to[TIME_PERIOD]=false)
- INDEC, available at <https://www.indec.gob.ar/indec/web/Institucional-Indec-InformacionDeArchivo-5>

Figure 5A.2: VAT revenue to GDP, C-efficiency, and VAT rate hikes in Hungary (2006-2014)

- Source: Eurostat
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/b43a1333-eb8a-4efe-bebe-279bf6bc73d8?lang=en>
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/6bd72759-930c-47d7-81db-19ead0e696d2?lang=en>

Figure 5A.3: VAT revenue to GDP, C-efficiency, and VAT rate hikes in Romania (2006-2015)

- Source: Eurostat
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/b43a1333-eb8a-4efe-bebe-279bf6bc73d8?lang=en>
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/6bd72759-930c-47d7-81db-19ead0e696d2?lang=en>

Figure 8A.1: VAT revenue to GDP in Latvia, Hungary, Poland (2013, 2021)

- Source: Eurostat
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/b43a1333-eb8a-4efe-bebe-279bf6bc73d8?lang=en>
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/6bd72759-930c-47d7-81db-19ead0e696d2?lang=en>

Figure 8A.2: C-efficiency in Latvia, Hungary, Poland (2013-2021)

- Source: Eurostat
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/b43a1333-eb8a-4efe-bebe-279bf6bc73d8?lang=en>
 - o <https://ec.europa.eu/eurostat/databrowser/bookmark/6bd72759-930c-47d7-81db-19ead0e696d2?lang=en>