Tulane Economics Working Paper Series

CAN INDONESIA REFORM ITS TAX SYSTEM? PROBLEMS AND OPTIONS

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Working Paper 1906
October 2019

Abstract
The Indonesian tax system is plagued by a number of problems. Of most importance, the tax system generates an extraordinarily low level of revenues, due to several aspects of the tax system. There is evidence of significant amounts of tax evasion. The tax base has also been reduced by deliberate tax structure decisions, especially the choice of thresholds in the corporate income tax and in the value-added tax, along with the extensive system of fiscal incentives that are available in both taxes. These features of the tax system contribute to an overly complicated system, and they also illustrate the limitations of the tax administration. Indeed, the system has evolved over time in a piecemeal, ad hoc manner with little apparent thought given to the ways in which the pieces of the system need to fit together. This paper analyzes these problems, and it suggests possible options for tax reform.

Keywords: Indonesia, tax reform.
JEL codes: H20, H24, H25, H87.

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INTRODUCTION

Tax reform seems an enduring, almost a permanent, subject of interest. In the last half century there has been an endless stream of tax reforms pursued and enacted by countries around the world.[1] Some countries have introduced fundamental and comprehensive reforms of their entire tax systems. Other countries have pursued narrower and more piecemeal reforms of specific taxes, especially individual and corporate income taxes. Many other countries have undertaken studies of their tax systems as a first step in the reform process, without following up with actual reforms. The goals of all of these efforts have been the obvious ones: to achieve distributional equity, to reduce economic distortions, to promote economic growth, to simplify taxes, to generate additional revenues, even to improve the political acceptability of the tax system. Some reforms have apparently achieved some successes. The outcomes of many other reforms remain murky and often even unexamined.

Indonesia is no exception. The Indonesian tax system has undergone some major changes in the last several decades, starting with the comprehensive tax reform of the mid-1980s (Gillis, 1985, 1989b, 1990) and continuing with more piecemeal changes in the following years (International Monetary Fund, 1998, 2014; The World Bank, 2016a, 2016b). As discussed and documented in detail later, these changes have been beneficial in a variety of dimensions, but even so the tax system remains plagued by a number of problems. Of most importance the tax system generates a low level of revenues: the ratio of revenues (or of taxes) to gross domestic product (GDP) is extraordinarily low, compared to international standards, to Indonesia's development needs, and to Indonesia's sustainable fiscal deficit. This low level of tax revenues is attributable to several aspects of the tax system. There is evidence of significant amounts of tax evasion, evasion that significantly erodes the tax base and reduces tax revenues, that distorts behavioral incentives, and that compromises the distributional objectives of the system. The tax base has also been reduced by deliberate tax structure decisions, especially the choice of thresholds in the corporate income tax (CIT) for small- and medium-enterprises (SMEs) and in the value-added tax (VAT), along with the extensive system of fiscal incentives and exemptions that are available in both taxes. The VAT threshold is especially high by most international

[1] There is an enormous literature on "world-wide tax reforms." For example, see Pechman (1988), Gillis (1989a), Boskin and McLure, Jr. (1990), Thirsk, (1997), and Alm, Martinez-Vazquez, and Rider (2005); a comprehensive review of these many reforms is provided by Alm and Martinez-Vazquez (2015). There is also an enormous literature on specific country tax reforms, often produced by the International Monetary Fund and The World Bank. For a recent and more conversational discussion of world-wide tax reforms, see Reid (2018).

standards, with the result that revenues are reduced and firms have an incentive to remain (or to report) below the threshold. As for tax incentives, they are seldom tracked, quantified, and evaluated, they generate significant revenue losses, and their intended effects on economic growth are uncertain. These (and other) features of the tax system contribute to an overly complicated system, and they also illustrate the limitations of the tax administration. The fundamental reforms of the tax system in the 1980s aligned Indonesia's tax system with international best practices at the time, and many of these structural features remain largely in place. Even so, the tax system has demonstrated that it is unable to generate sufficient revenues, in part because the system has evolved over time in a piecemeal, ad hoc manner with little apparent thought given to the ways in which the pieces of the system need to fit together.

These problems are not unique to Indonesia. Further, many of these problems are not new even to Indonesia, and have been considered in previous studies of the Indonesian tax system, going as far back as two decades (International Monetary Fund, 1998) and continuing more recently (International Monetary Fund, 2014; The World Bank, 2016a, 2016b). Even so, as emphasized by Alm and Martinez-Vazquez (2015), the lessons from these tax reform efforts in Indonesia and beyond are often unclear, sometimes even unexamined, and always specific to a particular country and a particular time.

This paper analyzes the many *problems* of the Indonesian tax system, and it suggests possible *options* for reform that draw upon the lessons learned in Indonesia and elsewhere but that tailor these plans to Indonesia today. The next sections outline the basic structure of the current Indonesian tax system, compare Indonesian tax practices to international practices, and then analyze specific problems with the tax system. The final section presents some issues that need to be considered in any possible tax reform, suggests some short-term and longer-term tax reform options, and considers the prospects for these reforms.

THE INDONESIAN TAX SYSTEM

The Indonesian tax system relies upon both direct taxes (i.e., personal income tax, corporate income tax, property tax) and indirect taxes (i.e., VAT, excise taxes, customs and import duties, export taxes). There are also several minor taxes. The revenues from these major sources since 2007 are shown in Table 1. Panel A shows the revenues in billions of Indonesian rupiah (Rp.), Panel B shows the composition of revenues as a percent of Total Tax Revenues, and Panel C shows the composition as a percent of GDP.[2]

Table 1 indicates several main findings. First, the ratio of Total Tax Revenues to GDP has stayed roughly in the 12% to 14% range over the last several years, and stood at slightly below 12% of GDP in 2015. As emphasized throughout this article, this ratio is quite low along multiple dimensions. Second, the value-added tax (VAT) is the most important single tax, accounting for nearly 1/3 of total taxes, followed by the corporate income tax (CIT) and the personal income tax (PIT). Third, a striking feature is the complete absence of revenues from social security contributions or taxes on payroll and workforce, an aspect that makes Indonesia largely unique among most all other countries. Even so, Indonesia has in recent years started to enact a broad-based social security program, with specific features that are still emerging.[3]

Each of the major taxes is considered next. This discussion is relatively brief, given the detailed discussion of these taxes available elsewhere. See especially International Monetary Fund (2014), The World Bank (2016a, 2016b), and Organisation for Economic Co-operation and Development (OECD) (2017). See also the detailed descriptions of the taxes available both at the Government of Indonesia, Ministry of Finance website (https://www.kemenkeu.go.id/en) and at the PricewaterhouseCoopers (PwC) website (https://www.pwc.com/id/en/pocket-tax-book/english/ptb-2018-eng.pdf).

[2] At the time of writing, the exchange rate between the U.S. dollar (US$) and the Indonesian rupiah was 1 US$ = 13,921 Rp.

[3] Starting on 1 January 2014, a comprehensive social security program that in principle will cover all Indonesian citizens has been in place, in which employers are responsible for ensuring that their employees are covered by collecting employee contributions made through payroll deductions. The social security system consists of two parts: health insurance is administered by the Social Security Agency for health insurance (*Badan Penyelenggara Jaminan Sosial Kesehatan*), and working accident protection, old age savings, death insurance, and pensions are administered by the Social Security Agency for social security (*Badan Penyelenggara Jaminan Sosial Ketenagakerjaan*). Employer-paid (employee-paid) contribution rates are 2% (1%) for pensions, 3.7% (2%) for old age savings, and 4% (1%) for health insurance; there are also employer-paid contribution rates for death insurance (0.3%) and for working accident protection (0.24% to 1.74%). By the end of 2016 roughly 140 million Indonesians were registered. It is anticipated, or at least hoped, that coverage will be universal by 1 January 2020.

TABLE 1 *Revenues of Indonesia*

A. In Billions of Indonesian Rp.

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Taxes on Income, Profits, and Capital Gains	238,431	327,498	317,615	357,046	431,122	465,070	506,443	546,181	602,308
Personal Income Tax	77,250	96,002	107,632	122,031	150,537	171,210	197,987	238,058	292,819
Corporate Income Tax	161,181	231,496	209,983	235,015	280,585	293,859	308,456	308,123	309,489
Social Security Contributions	0	0	0	0	0	0	0	0	0
Taxes on Payroll and Workforce	0	0	0	0	0	0	0	0	0
Taxes on Property	29,677	30,927	30,735	36,607	29,892	28,969	24,305	23,476	29,250
Taxes on Goods and Services	220,143	297,241	268,456	325,685	408,932	482,269	540,622	570,915	603,292
VAT	154,527	209,647	193,068	230,605	277,800	337,585	384,714	409,182	423,711
Excises	44,679	51,252	56,718	66,166	77,010	95,028	108,452	118,086	144,641
Customs and Import Duties	16,699	22,764	18,105	20,017	25,266	28,418	31,621	32,319	31,213
Taxes on Exports	4,237	13,578	565	8,898	28,856	21,238	15,835	11,329	3,727
Other Taxes	37,718	47,728	48,241	60,146	83,260	99,276	119,397	145,082	127,038
Total Tax Revenues	**525,969**	**703,394**	**665,047**	**779,484**	**953,206**	**1,075,584**	**1,191,766**	**1,285,655**	**1,361,889**
Inflation Rate (CPI) (percent)	6.40	10.21	4.45	5.12	5.38	4.28	6.40	6.42	6.38

B. As Percent of Total Taxes

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Taxes on Income, Profits, and Capital Gains	45.33	46.56	47.76	45.81	45.23	43.24	42.50	42.48	44.23
Personal Income Tax	14.69	13.65	16.18	15.66	15.79	15.92	16.61	18.52	21.50
Corporate Income Tax	30.64	32.91	31.57	30.15	29.44	27.32	25.88	23.97	22.72
Social Security Contributions	0	0	0	0	0	0	0	0	0
Taxes on Payroll and Workforce	0	0	0	0	0	0	0	0	0
Taxes on Property	5.64	4.40	4.62	4.70	3.14	2.69	2.04	1.83	2.15
Taxes on Goods and Services	41.85	42.26	40.37	41.78	42.90	44.84	45.36	44.41	44.30
VAT	29.38	29.81	29.03	29.58	29.14	31.39	32.28	31.83	31.11
Excises	8.49	7.29	8.53	8.49	8.08	8.84	9.10	9.18	10.62
Customs and Import Duties	3.17	3.24	2.72	2.57	2.65	2.64	2.65	2.51	2.29
Taxes on Exports	0.81	1.93	0.08	1.14	3.03	1.97	1.33	0.88	0.27
Other Taxes	7.17	6.79	7.25	7.72	8.73	9.23	10.02	11.28	9.33
Total Tax Revenues	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

C. As Percent of GDP

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Taxes on Income, Profits, and Capital Gains	6.03	6.62	5.67	5.20	5.50	5.40	5.31	5.17	5.22
Personal Income Tax	1.96	1.94	1.92	1.78	1.92	1.99	2.07	2.25	2.54
Corporate Income Tax	4.08	4.68	3.75	3.42	3.58	3.41	3.23	2.92	2.68
Social Security Contributions	0	0	0	0	0	0	0	0	0
Taxes on Payroll and Workforce	0	0	0	0	0	0	0	0	0
Taxes on Property	0.75	0.62	0.55	0.53	0.38	0.34	0.25	0.22	0.25
Taxes on Goods and Services	5.57	6.01	4.79	4.74	5.22	5.60	5.66	5.40	5.23
VAT	3.91	4.24	3.44	3.36	3.55	3.92	4.04	3.87	3.67
Excises	1.13	1.04	1.01	0.96	0.98	1.10	1.14	1.12	1.25
Customs and Import Duties	0.42	0.46	0.32	0.29	0.32	0.33	0.33	0.31	0.27
Taxes on Exports	0.11	0.27	0.01	0.13	0.37	0.25	0.17	0.11	0.03
Other Taxes	0.95	0.96	0.86	0.88	1.06	1.15	1.25	1.37	1.10
Total Tax Revenues	**13.31**	**14.21**	**11.86**	**11.36**	**12.17**	**12.48**	**12.48**	**12.17**	**11.80**

Note: Not all sub-items of “Taxes on goods and services” are listed.

Source: Organisation for Economic Co-operation and Development (OECD) (2017).

Personal Income Tax (PIT)[4]

The personal income tax (PIT) is due from any person who is a permanent resident of Indonesia. Taxable income is based on a "comprehensive income" concept, and includes in principle "active income" from wages, salaries, tips, commissions, and business income earned by resident individuals, including sole proprietorships and unincorporated businesses. Under current law, each individual receives a basic personal relief (*Penghasilan Tidak Kena Pajak*, or PTKP) of Rp. 24,300,000 annually. The Indonesian income tax system treats a family as a single tax reporting unit with a single taxpayer identification number in the name of the head of the household, typically the husband. There is also no preferential treatment of realized capital gains. Non-residents are subject to a withholding tax of 20% of Indonesian-sourced income.

Individuals are allowed to deduct 2% of their gross wages and salaries (with no cap) for pension contributions and/or old-age security through pension funds and social security providers approved by the Ministry of Finance, such as *Jamsostek*, *Taspen*, *Asabri*, and *Askes*. Individuals are also allowed to deduct from their wages and salaries (but not from business incomes) standard occupational expenses (e.g., *biaya jabatan*) of 5% of gross income, up to Rp. 6 million per taxable year, or Rp. 500,000 per month. For employees with substantial amounts of salary income (for example, above Rp. 50 million per month), the cap on allowable occupational expenses of Rp. 500,000 per month will result in a very high percentage of their salary income being subject to tax. Note that pension income is fully subject to the PIT.

There are several exemptions or reliefs. A married individual taxpayer with a non-working spouse is given an additional relief of Rp. 2,025,000. The taxpayer is also given an additional relief of Rp. 2,025,000 for each additional dependent, such as elderly parents or unmarried children, including foster children, under the age of 18 or still in school or with no income, up to three dependents. If the spouse reports earning taxable income and files a joint return, an additional basic personal relief of Rp. 24,300,000 is allowed. There is at present little ability to ensure that the claimed dependents are truly eligible. Also, fringe benefits and in-kind benefits provided by the employer are not subject to the PIT. Note that the employer is not allowed to deduct the cost of these benefits, which means that the benefits are effectively taxed

[4] This discussion draws heavily on Sugana, Zolt, and Gunardi (2013).

at the employer’s tax rate (25% for corporations, 20% for public-traded companies, or 12.5% for businesses with annual turnover less than Rp. 50 billion).

The tax rates imposed on the resulting based are steeply progressive, starting at 5% for income up to Rp. 50 million and rising to 30% for income above Rp. 500 million. The total number of registered individual taxpayers in Indonesia was 23.5 million in 2015 (OECD, 2017), a substantial increase from the 2.9 million registered individual taxpayers in 2006. Despite this large increase, the number of registered taxpayers in 2015 is only about one-fifth of the working population.

Withholding Systems

The Indonesian tax system collects a substantial proportion of its revenue through withholding, sometimes called “retention taxes,” as specified in Articles 22, 23, and 26 of the Income Tax Law No. 36/2008. There are more than 8 different rates for final withholding taxes and 20 different rates for provisional withholding taxes. This withholding tax mechanism requires that the collection and remittance of taxes is the responsibility of the agent making the relevant payment to a recipient, rather than the recipient himself or herself. Designated withholding agents are subject to penalties if they do not collect and remit correct amounts of taxes in a timely manner. The withholding agents are only required to report the amount of tax withheld on an aggregate basis, not on a taxpayer-by-taxpayer basis. Withholding schemes apply to wages and salaries, interest, dividends, rents, fees, lottery winnings, and stock sales. There are also withholding schemes that apply to a wide range of other purchases and payments.

Corporate Income Tax (CIT)

Like most corporate income taxes (CIT), the Indonesian CIT is imposed on the net income of companies and business entities, determined from accounting records in accordance with the law after deducting all expenses and professional charges, including: depreciation (on a straight line, declining balance, or accelerated basis); provisions for “bad” debts (under some conditions); inventory adjustments; donations and grants (up to a maximum of 2% of sales); and reinvested earnings (under some conditions).

Prior to the 2008 income tax reform, incomes of corporations were subject to progressive tax rates, starting at 2% for taxable income less than Rp. 250 million, rising to 25% for income between Rp. 250 million and Rp. 1 billion, and rising further to 27.5% for income above Rp. 1 billion. The enactment of Income Tax Law No. 36/2008 replaced the graduated corporate income tax rate structure with a single tax rate of 28% in fiscal year 2009, and then reduced the tax rate to 25% effective in fiscal year 2010. The law also provided a preferential corporate income tax rate of 20% for listed corporations that trade at least 40% of their shares on the Indonesian stock exchanges, subject to some requirements.[5] This tax incentive for companies listed on Indonesian stock exchanges with publicly traded shares was intended to promote Indonesian capital markets and encourage public ownership of Indonesian corporations.

There are several features of the tax laws that provide favorable tax treatment for small- and medium-sized enterprises (SMEs).[6] Income Tax Law No. 36/2008 extended a preferential income tax rate for SMEs with an annual turnover up to Rp. 50 billion. These corporations are entitled to a 50% discount of the standard corporate income tax rate of 25%, for a preferential tax rate of 12.5%, applied proportionally on the taxable income corresponding to gross turnover up to Rp. 4.8 billion. There is also a simplified tax system for SMEs. Effective 1 July 2013, Government Regulation No. 46/2013 allowed certain SMEs (both sole proprietors and corporations) with a total annual gross turnover from all business activities of less than Rp. 4.8 billion to become eligible for the SME tax regime. Under this tax regime, eligible taxpayers are taxed at 1% of their gross turnover, not on their taxable profits under the normal CIT regime. This simplified tax regime does not apply to self-employed professionals, including lawyers, doctors, consultants, brokers, artists, athletes, and the like, and microenterprises (e.g., street vendors) are also excluded from this tax regime. For the eligible taxpayers, the new tax regime is mandatory. The introduction of the SME tax regime was intended to reduce the administrative burden on eligible taxpayers, who do not have the capacity to keep proper books and records. The SME tax regime is effectively a tax on gross receipts (similar to a turnover tax) rather than a tax on net income; that is, companies are not allowed to deduct legitimate expenses in determining their tax liability, and companies that incur losses from operations still have tax liability. This simplified tax regime does not apply to non-residents with permanent establishments and other non-resident taxpayers. Incomes derived from sources that are already

[5] See Government Regulation No. 81/2007. To qualify for the lower tax rate, corporations must satisfy two conditions: at least 40% of the paid-in shares must be publicly owned; and the public ownership should consist of at least 300 persons (legal or natural), each holding less than 5% of the total paid-in shares. These two conditions must be maintained for at least 183 days within a tax year.

[6] See Tambunan (2009) for a detailed discussion of SMEs in Indonesia and other Asian countries.

specifically regulated under the Income Tax Law No. 36/2008 are also excluded from this tax regime.

Value-added Tax (VAT)

The value-added tax (VAT) is imposed on the difference between revenues and purchased inputs (e.g., the “value added”) in goods and services. Indonesia adopted a VAT in 1983 (under Law No.8/1983), which became effective in April 1985. This new VAT was designed to be simple and applied only to the manufacturing sector. The standard VAT rate was set at 10%, and the Minister of Finance had the authority to change the single standard rate within a range between 5% and 15%. The VAT was imposed using the destination principle, levied on consumption, and collected using the tax-credit method (e.g., the VAT paid on inputs is deductible (or credited) from the VAT collected on sales). At the time of its introduction, the VAT did not allow exemptions or zero-rating of any domestically produced manufacturing products that were consumed domestically. However, a separately administered sales tax on “luxury” goods sales tax (LGST) was designed to complement the VAT as part of the same 1983 law; this tax applied to a limited number of items, such as automobiles, aircrafts, cameras, firearms and yachts, at rates of 10% and 20%. The main changes over time to the VAT have been the expansion of the tax base from only manufacturing to wholesale and retail firms and to some services, the introduction of numerous exclusions or exemptions, and the expansion of the LGST to additional items. Of special note, the VAT registration threshold was increased by Ministry of Finance Regulation No. 197/PMK.03/2013 in January 2014 from Rp. 600 million to Rp. 4.8 billion of gross turnover, with mandatory registration for enterprises with gross turnover above the threshold and voluntary registration to those with gross turnover below the threshold, making the Indonesian VAT threshold is one of the highest in the world.

Customs and Import Duties, Export Duties, and Excise Taxes

An import duty is imposed on the customs value of imported goods such as automobiles and automobile components, vessels, electronic goods, footwear, beverages, essential oils and resinoids, agricultural products, and textiles. Rates generally range from 0% to 40%, though could reach as high as 150%. There are also export duties imposed at rates that vary from 0% up to 60% on leather and wood, cocoa beans, palm fruit and its derivative products, and mineral concentrates . In addition, Indonesia imposes a variety of specific excise taxes. The main excise taxes are on tobacco, motor vehicles, and alcohol. These taxes are imposed either as ad valorem rates or as specific taxes. In total, they generate relatively little revenues.

The current tobacco excise tax is an extraordinarily complicated multi-tiered system. The maximum allowable cigarette excise tariff under Excise Law No. 39/2007 is 57% of the corresponding retail price (*harga jual eceran*). The specific rates per cigarette sticks vary by type of product (e.g., kretek and white cigarettes by machine and kretek cigarette by hand-roll) and by production levels and the retail price. This complex system has been somewhat simplified in recent years, by reducing the number of excise tax tiers from 19 to 13 between 2009 and 2013 and further down to 11 tiers by 2015 (Ministry of Finance Regulation No. 205/PMK.011/2014), and also by reducing the differential between the highest and the lowest excise tax rate. Even so, the excise tax system remains cumbersome and unwieldy, favoring smaller producers and producers of hand-rolled kreteks and encouraging larger cigarette producers to fragment their production into smaller production units.

The excise tax on alcohol is based on alcohol content. These taxes range from Rp. 13,000 per liter to Rp. 139,000 per liter. There are also several other excise taxes imposed both at the central and sub-national government levels, but their yields are negligible.

Fiscal Incentives for Investment

Indonesia currently offers three major fiscal incentives for investment at the national level: tax allowances, tax holidays, and import duty exemptions. These are the incentives potential investors see if they were to access the Investment Coordinating Board (*Badan Koordinasi Penanaman Modal*, or *BKPM*) website (https://www2.bkpm.go.id/).

Tax allowances are specified by Government Regulation (PP) No. 18/2015, which replaces PP 52/2011 and its previous versions. This regulation offers tax allowances for a new investment or an expansion of existing investment to 143 business sectors. Administratively, in line with the implementation of a “One Stop Service” (OSS), the process to apply for the incentives now only requires submission of the prerequisite documents to the Front Office in *BKPM*. The specific forms of tax allowances include:

- a reduction in net taxable income of a total of 30% of the realized investment in fixed assets (including land), spread equally at 5% a year for 6 years;

- greater depreciation and amortization rates (based on straight line or declining balance method) for tangible and intangible assets;
- 10% income tax on dividends paid to a foreign entity (instead of the usual 20%), or a lower rate of income tax according to Double Taxation Avoidance Agreement applied between Indonesia and other countries; and
- a loss carry forward against future profit (or net income deductions for a period or 5 to 10 years) from losses incurred in the first year.

To apply, investors need to submit the tax allowances application at *BPKM* by attaching the administrative documents specified in the regulation. Additionally, investors need to meet the qualitative requirements specified at a technical ministry level. If all the documents are legitimate and correct, the *BKPM* will organize a Trilateral Meeting with the Directorate General of Tax and representatives from the related ministry. The Trilateral Meeting will decide whether the application is approved, rejected, or postponed if more clarification is needed.

A second incentive is a "tax holiday," as specified by Minister of Finance Regulations (PMK) No. 130/2011 and No. 192/2014. This incentive provides a temporary exemption from taxation to firms making large investments in a "pioneer" industry, defined by the Ministry of Finance as an industry that has strong connections and linkages to other sectors, that provides high value added and positive spillovers to these sectors, and that introduces new technology and strategic value for the national economy. An applicant must demonstrate that: the investment is in a pioneer industry; the investment plan has a value of at least Rp. 1 trillion (with at least 10% of the planned investment lodged in the Indonesian banking system); and the implementation of the investment plan has reached the commercial production stage. If approved, the firm receives a corporate tax exemption for a period of 5 to 10 years after the company starts commercial production and a 50% corporate tax reduction following the period of tax exemption for a maximum of 2 years. Investors who wish to obtain this incentive must submit the application to the Minister of Industry or the head of *BKPM*, who then submit the proposals for those deemed eligible to the Ministry of Finance. If an investor has met all the criteria, the Minister of Industry or head of *BKPM* issues a recommendation letter to the Minister of Finance. Following this, the Ministry of Finance will assign a verification committee to confirm the project.

A third incentive is an exemption from import duties under Ministry of Finance Regulation No. 76/2012. This incentive is intended to reduce company expenses in importing capital and intermediary goods. All manufacturing industries and certain services sectors (e.g., tourism and culture, transportation and communications for public transport, public health, mining, construction, telecommunications, automotive assembly, and ports) are eligible. The exemption from import duties lasts for two years, and applies both to new investments and to existing investment expansion; a longer exemption period of four years may be applicable if the investment by the manufacturing company utilizes 30% domestic machinery over all installed machinery. To be eligible for the exemption, the imported capital/intermediary goods cannot be available in the quantity and quality required locally, so that an import exemption cannot be provided when a comparable good is available locally. The application for exemption from import duty is addressed to the head of *BKPM* together with the required documents defined in the regulation, who decides if the application is approved or rejected.

Analysis of these tax incentives by the Fiscal Policy Office (*Badan Kebijakan Fiskal*, or *BKF*) in the Ministry of Finance indicates that these incentives are used by very few firms and sectors. For example, in 2014 there were only 32 total applications, of which 2 were approved and 30 were disapproved; over the previous 8 years there were in total only 323 applications, of which 83 were approved and 240 were disapproved.

Sub-national Government Taxes

Sub-national governments impose a variety of taxes and fees. These taxes and fees in total generate little revenues, with the exception of the land and building tax (*Pajak Bumi dan Bangunan*, or *PBB*). In 2009, the central government adopted Law No. 28/2009 on Regional Taxes and User Charges, in which authority over the tax was transferred over the next several years to provincial and district governments, including the authority to change the tax rate up to a maximum of 0.3% of the assessed value of the property. (A tax on the transfer of land and buildings was also devolved to local governments in 2011, imposed at 5% of the gross transfer value.) The amount of sub-national government taxes as a percent of total government taxes was in 2014 at 10.7%, up from 3.5% in 2000.[7]

SOME INTERNATIONAL COMPARISONS

Indonesia raised slightly less than one-eighth of GDP in taxes in 2015. A natural question to ask is whether Indonesia has an "adequate" *level* of revenue mobilization. This is no easy

[7] For discussions of the evolution of sub-national government taxation in Indonesia since the 1983 tax reform, including the impacts of decentralization, see Devas (1988), Kelly (1993), Alm, Aten, and Bahl (2001), and Lewis (2003).

question to answer. There is also the question of whether Indonesia relies too much or too little on certain forms of taxation relative to other comparable countries; that is, the *structure* of taxation in Indonesia is a relevant consideration. The *tax rates* of the individual taxes are also essential factors. Finally, the ways in which the overall Indonesian tax system affects the *investment climate* are important considerations. Each of these areas is discussed, emphasizing comparisons of Indonesian practice with international practice.[8]

Level of Taxes in Indonesia: Some International Comparisons

When the *level* of taxation in Indonesia (as a percent of GDP) is compared to other countries, taxes relative to GDP are generally lower for Indonesia, and significantly so. Table 2 shows the average level of taxes as a percent of GDP by country groupings for the last four decades, as calculated from *Government Finance Statistics*. Indonesia's level of taxes is lower than all other country groupings, including developing countries.

TABLE 2 *Ratio of Taxes to GDP by Country Grouping (as percent of GDP)*

	Decade			
Country Group	**1980s**	**1990s**	**2000s**	**2010s**
Industrialized	33.7 (8.4)	35.5 (8.5)	33.4 (8.4)	34.7 (8.6)
Developing	17.3 (8.3)	17.0 (7.7)	17.0 (7.9)	17.5 (8.1)
Transition	47.7 (9.7)	29.6 (11.0)	29.1 (9.0)	--- ---
Total	21.6 (11.3)	22.6 (11.5)	21.8 (10.4)	22.9 (11.3)
Indonesia	***18.0***	***16.0***	***12.1***	***12.1***

Note: The numbers represent decade averages for the relevant country groupings, with standard deviations in parentheses.
Source: Calculations by author from International Monetary Fund *Government Finance Statistics*, various issues.

A more traditional "tax effort" analysis gives similar conclusions. Using IMF data, it is possible to compare the ratio of taxes to GDP for 117 countries. These data show the ratio for Indonesia to be 11.8% of GDP in 2015, by comparison with an average for this sample of countries of 25.8%. This simple comparison again suggests that Indonesia has a below average

[8] For recent and insightful analyses of many of these issues, see The World Bank (2016a, 2016b), Hamilton-Hart and Schulze (2017), and OECD (2017).

level of taxation. However, averages are misleading because countries are very different from one another in terms of their capacity to tax.

If Indonesia is compared to mainly other Asian countries (as well as Latin America and Caribbean (LAC) countries), a similar conclusion is reached. According to the OECD (2017), Indonesia has the lowest ratio of taxes to GDP in all comparisons, at 11.8%. This is also not a recent phenomenon. OECD data on the ratio of taxes to GDP for these same countries over the period 1990 to 2015 show again that Indonesia is a very low-tax country.

The use of ordinary least squares (OLS) regression analysis provides a more controlled examination of tax effort, in which a set of explanatory variables that reflect country differences in taxable capacity is used to predict taxes as a percent of GDP.[9] There are many specific explanatory variables that can be used in these regressions, but a widely used approach uses a standard set of variables, such as *Per Capita GDP*, the degree to which the economy is open to trade (*Openness*), the *Population Size*, the *Agricultural Share of GDP*, and the *Population Growth Rate*. OLS regressions can be estimated with various combinations of these explanatory variables, with all variables measured in logarithms. See Box 1.

BOX 1 *Regression Results for the Determinants of Tax Revenue to GDP Ratio*

Some simple OLS regressions are reported in Box Table I below. The dependent variable is the ratio of tax revenue to GDP; various explanatory variables are used in different specifications. The sample consists of 119 developed and developing countries averaged over the period 2000 to 2009. The explanatory variables are in general statistically significant and with the expected signs. The Tax/GDP ratio is significantly higher in countries where per capita GDP and openness are higher, and where the agricultural share of GDP and the population growth rate are lower. The regressions explain between 47% and 67% of the variation. The ratio of "predicted" Tax/GDP to "actual" Tax/GDP is used to generate the estimated "tax effort" of Indonesia, as discussed in the text.

BOX TABLE I *Regression Results*

	Specification			
Variables	**(1)**	**(2)**	**(3)**	**(4)**
Constant	-0.65 (1.07)	2.97 (8.81)**	1.21 (3.75)*	3.23 (9.75)**
Per Capita GDP	0.23 (12.11)**		0.21 (6.19)**	
Openness	0.31 (3.99)*	0.27 (3.26)*	0.22 (4.17)**	0.32 (3.12)*
Population Size	0.06 (1.61)			

[9] The empirical literature on tax effort is enormous, beginning with Bahl (1971) and continuing more recently with Bird, Martinez-Vazquez, and Torgler (2008) and Fenochietto and Pessino (2013). For a recent and specific application to Indonesia, see Zolt and Nyblade (2017).

Agricultural Share of GDP		-0.37 (7.81)**		-0.26 (6.43)**
Population Growth Rate			-0.19 (4.27)**	-0.24 (8.41)**
Adjusted R^2	0.59	0.47	0.67	0.65
Observations	119	119	119	119

Notes: Data are averages for the period 2000-2009. All variables are expressed in logarithms, except the population growth rate. t-statistics are shown in parentheses, and * and ** denote significance at the 10%, 5%, and 1% levels, respectively

Source: Calculations by author.

The estimation results in Box 1 can then be used to estimate an "expected" level of the tax ratio for Indonesia, or its "Tax Capacity." For example, across the various specifications in Box 1 Indonesia "should" raise on average 23% of GDP in taxes. The actual ratio of taxes to GDP in the 2000s was about 13%. The ratio of the actual tax ratio to the estimated (or expected) tax ratio is the "Tax Effort." Indonesia's tax effort is therefore 0.57 (or 13/23), which can be interpreted as showing that Indonesia raises only 57% of what an "average" country with its economic features would be expected to collect. Based on this international comparison, Indonesia appears to be a well below-average tax country.

This conclusion is supported by a large number of other empirical studies. Le, Moreno-Dodson, and Bayraktar (2012) estimate Indonesia's tax effort as 81% for the period 2002-2009. Fenochietto and Pessino (2013) build upon the earlier work of Pessino and Fenochietto (2010) by using a stochastic tax frontier estimation method to estimate tax capacity and tax effort. They conclude that Indonesia's tax effort in 2011 ranged from 42% to 47% of its tax capacity. Additional (and still somewhat preliminary) empirical analyses by Zolt and Nyblade (2017) extend the Fenochietto and Pessino (2013), and estimate that Indonesia's tax effort varied for the discrete time periods of 1990, 2000, and 2010, but was always well below one. For example, in one set of representative estimates for 2010, they estimated a tax capacity for Indonesia of about 31% of GDP; with an actual ratio of taxes to GDP of 10.5% in 2010, the estimated tax effort of Indonesia was slightly above 1/3. When they repeated the analysis using only non-resource taxes, they estimated a slightly higher but still low tax effort of around 40%.

Overall, it is impossible to avoid the conclusion that Indonesia generates a far lower level of taxes than an average country of similar characteristics.

Structure of Taxes in Indonesia: Some International Comparisons

A different issue is whether Indonesia's tax *structure* (as opposed to the *level* of taxes) is similar to that of other countries. To provide a broad perspective on Indonesia's tax structure, Table 3 presents International Monetary Fund (IMF) *Government Finance Statistics* data for three tax groupings (i.e., income taxes, indirect taxes, and taxes on international trade) and three country groupings (i.e., industrialized, developing, and transition countries). Table 3 demonstrates that the burden of income taxation is considerably higher in Indonesia, at least in recent years (2000s) than in other developing countries. Table 3 also shows that the burden of indirect taxes plus taxes on international trade is roughly the same in Indonesia as in other developing countries. However, taxes on international trade are considerably lower in Indonesia than in most all other comparable countries, with the obvious benefit that lower trade taxes encourage more trade. Note that the use of OECD (2017) data gives broadly similar results.

TABLE 3 *Tax Structure by Country Grouping (taxes as percent of total taxes)*

	Decade			
Income Tax	**1980s**	**1990s**	**2000s**	**2010s**
Industrialized	37.8 (13.7)	38.6 (10.9)	53.8 (8.1)	48.2 (9.1)
Developing	28.6 (19.1)	27.6 (16.5)	28.3 (17.8)	28.3 (18.8)
Transition	16.5 (13.8)	26.7 (9.6)	23.3 (6.5)	23.3 (7.9)
Total	30.2 (18.5)	29.7 (15.4)	28.5 (16.4)	28.5 (16.7)
Indonesia	***39.7***	***40.7***	***44.9***	***43.5***
Indirect Taxes				
Industrialized	29.4 (9.0)	30.5 (10.1)	19.8 (10.7)	19.8 (11.1)
Developing	29.3 (17.3)	34.9 (17.7)	40.1 (17.8)	40.1 (18.5)
Transition	21.8 (14.4)	37.9 (12.3)	42.1 (9.6)	42.1 (10.7)
Total	28.9 (15.8)	34.2 (15.9)	39.0 (16.4)	39.0 (16.7)
Indonesia	***40.2***	***45.8***	***42.7***	***45.1***
Taxes on International Trade				
Industrialized	2.8 (4.3)	1.0 (2.0)	1.0 (0.6)	1.0 (1.3)
Developing	30.7 (20.2)	25.6 (18.9)	19.0 (18.0)	19.0 (19.1)
Transition	5.2	7.6	5.4	5.4

	(3.8)	(7.3)	(5.5)	(6.9)
Total	23.8 (21.4)	18.2 (18.9)	14.1 (16.5)	14.1 (18.3)
Indonesia	***6.1***	***4.9***	***3.5***	***2.6***

Note: The numbers represent decade averages for the relevant country groupings, with standard deviations in parentheses.
Source: Calculations by author from International Monetary Fund *Government Finance Statistics*, various issues.

These simple comparisons do not control for country characteristics that might affect collections. By comparing actual to predicted revenues using regression analysis, but doing the regression analysis for each specific tax, it is again possible to calculate indexes of tax effort by country, now by specific tax.

As in the previous analysis, the first step in calculating, say, tax effort for taxes on income, profits, and capital gains is to identify variables that measure the capacity of a country to raise income tax revenue. The same explanatory variables are used as in the previous estimation: per capita GDP, population size and growth, openness, and agricultural share. An OLS regression is estimated for taxes on income, profits, and capital gains as a percent of GDP on a sample of 35 countries (where all variables are entered in log form and where averages of the relevant tax to GDP ratio for countries are used for the period 2000-2010). These regression results are then used to estimate an expected or predicted level of income taxes for Indonesia. A country of Indonesia's income, population, population growth, openness, and agricultural share would on average raise 5.9% of its GDP in income taxes. In fact, Indonesia raises on average only 5.2%, or somewhat below the predicted amount. Indonesia's tax effort index for these taxes on income, profits, and capital gains (or the actual percent divided by the estimated percent) is 0.88. These international comparisons suggest that there is some room for increasing the effective tax rate for the income tax.

Similar comparisons can be made for the other major taxes. These comparisons indicate that Indonesia is a relatively heavy user of the corporate income tax and the VAT, and a relatively average user of overall indirect taxes.

Tax Rates in Indonesia: Some International Comparisons[10]

[10] See Tanzi and Zee (2000) for some general, if now somewhat dated, comparisons.

Focusing on the main taxes, Indonesia's tax rates are generally comparable to international levels. For the PIT, the dominant world-wide trend in the last 25 years is a significant decline in top marginal tax rates and overall marginal tax rates (Peter, Butrick, and Duncan, 2010). In a sample of 189 countries at all levels of income and in regions of the world, the GDP-weighted average top statutory PIT rate fell from a high of 62% in 1981 to 56% in 1986. During the ensuing eight-year period (1986-1993), the PIT top rate fell by another 16 percentage points. It then increased by a modest 2 percentage points (1993-1996) before resuming its downward trend in 1996. Since then, the decline has continued, with average top statutory rates falling an additional 6.5 percentage points over the next 10 years. Overall, there has been a drop of 41% in the weighted top PIT rate, from a high of 62% in 1981 to a low of 36% in 2005. In addition, only 17% of unweighted top PIT rates were in excess of 40% in 2001-2005 compared to over 71% during the early 1980s. The proportion of countries with top PIT rates in excess of 60% declined from one-fourth in 1981 to less than 1% in 2005. Countries with lower top PIT rates (or 1% to 40%) became more widespread over time. The percentage of countries falling into this category increased from approximately 15% to over 73% between 1981 and 2005. More recent data from the Tax Foundation (2017) shows a similar pattern.

Overall in 2001-2005, 10% of the 189 countries had a top marginal tax rate of 0%, 16% had a top rate between 1% and 20%, 23% had a top rate between 21% and 30%, 34% had a top rate between 31% and 40%, 16% had a top rate between 41% and 60%, and only 1% of the countries had a top rate above 61%. By this comparison, Indonesia's top personal income tax rate of 30% places it roughly at the median of these 189 countries. More recent data from the OECD (2017) shows a similar pattern.

Indonesia's standard corporate income tax is 25%, and its standard VAT rate is 10%. These rates are generally lower than most developed and developing countries. For example, the average standard VAT rate in OECD countries is now almost 18%, and the average (top) CIT tax rate in OECD countries is roughly 25%, with some countries (e.g., Ireland) significantly lower (OECD, 2017). In most countries, VAT rates have gone up over time, while CIT rates have generally come down.[11] As for social security contributions, there is much variation in payroll tax rates around the world. For example, the payroll tax rates in Sweden are over 80%, and most

[11] For example, the recently passed Tax Cuts and Jobs Act (TCJA) in the United States lowers the corporate income tax rate from 35% to 21%. Also, see Tax Foundation (2017) for a comparison of tax rates around the world in 2017.

OEDC countries have tax rates that exceed 40%, with the U.S. an outlier at 15.3%. Many developing countries have rates that range from 20% to 30%. Relative to most all of these countries, including many lower income countries, Indonesia's tax rates are quite low.[12]

The Investment Climate in Indonesia: Some International Comparisons

How do the level, structure, and rate of taxation in Indonesia affect the overall investment climate in Indonesia? These are important parts of the picture of how taxes affect the investment climate. However, there are other factors that affect Indonesia's investment climate.

The World Bank, working with PricewaterhouseCoopers, has conducted since 2003 a survey on the ease or difficulty in "doing business" (including the ease or difficulty of "paying taxes"), that now includes 190 countries around the world. The recent *Doing Business 2017* survey was accompanied by a more detailed analysis of tax-related issues in *Paying Taxes 2017*. The survey adopted a "case study company" approach, in which a standardized, common company is constructed, and then the specific institutional features of each country are applied to this identical company in order to determine how easy (or difficult) it is to conduct business in the country. There are various dimensions along which doing business is examined: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, trading across borders, enforcing contracts, resolving insolvency, and paying taxes. The last criterion is of special importance.

Specifically, the standard company is assumed (among other things) to: be a limited liability, taxable company in its second year of operation; be domestically owned, with five resident owners; be engaged in general industrial and commercial activities (e.g., producing and selling ceramic flower pots); have 60 resident employees (4 managers, 8 assistants, and 48 workers); have a turnover of 1050 times income per capita; and distribute 50% of its profits as dividends. The study also calculates a "Total Tax Rate" (TTR), which is meant to include all taxes that are paid by companies, including corporate income taxes as well as property taxes, labor taxes and contributions, sales, and other indirect taxes.

Overall, Indonesia ranks slightly above the median (or 91st) of the 190 countries included in the rankings in *Doing Business 2017*; its rankings in starting a business (151st), dealing with

[12] Recall that Indonesia has only recently enacted a social security program, and its contribution rates are at present very low by international standards.

construction permits (116th), registering property (118th), and enforcing contracts (166th) were especially low. Indonesia's ranking in *Paying Taxes 2017* (or 104th) was slightly below the median of the 190 countries. The indicator of the total tax rate in *Paying Taxes 2017* is of special relevance here. The total tax rate is a standardized indicator that is used to gauge the overall burden of taxes after adjusting for necessary exemptions and the like. Indonesia's total tax rate of 30.6% places it well below the world-wide average of 40.6% and also below the regional average of 36.2%, indicating that its total tax rate is relatively low by international standards. See Box 2 for details on *Paying Taxes 2017*.

BOX 2 *Indonesia's Rankings in Paying Taxes 2017*

There are 190 countries that are included in the 2017 rankings. The number in parentheses is the overall ranking of Indonesia in the relevant category. The "Distance to Frontier" (DTF) score shows the "distance" of the country to the "frontier" representing the best performance on the relevant indicator observed across all countries in the sample of countries since 2005. A DTF score of 0 indicates that the country is the worst performing country in the sample; a DTF score of 100 indicates the country is the best performing country; and a DTF score of 69.25 (e.g., Indonesia) indicates that the country is 69.25% of the distance from the worst to the best performing country.

Payments (number per year): 43
Profit tax payments (number per year): 13
Labor tax payments (number per year): 14
Other taxes payments (number per year): 16
Time to comply (hours per year): 221
Corporate income tax time (hours per year): 75
Labor tax time (hours per year): 56
Consumption tax time (hours per year): 90
Post-filing index (0-100): 76.49
Time to comply with VAT refund (hours per year): 18.0
Time to obtain VAT refund (hours per year): 30.9
Time to comply with corporate income tax audit (hours per year): 4.0
Time to complete a corporate income tax audit (weeks per year): 0.0 (e.g., an audit is unlikely)
Total tax rate (percent of profit): 30.6
Profit tax, total tax rate (percent of profit): 16.9
Labor tax, total tax rate (percent of profit): 10.3
Other taxes, total tax rate (percent of profit): 3.4

Overall Paying Taxes Rank: 104

Overall Paying Taxes DTF Score: 69.25

Source*: Paying Taxes 2017*.

ANALYZING THE PROBLEMS WITH THE INDONESIAN TAX SYSTEM

Tax systems are designed to achieve multiple objectives. An obvious purpose is to raise the revenues necessary to finance government expenditures (sometimes termed “adequacy”), and also to ensure that the growth in revenues is adequate to meet expenditure requirements (“elasticity”). Another is to distribute the burden of taxation in a way that meets with a society’s notions of fairness; such “equity” is typically defined in terms of “ability to pay,” such that those with equal ability should pay equal taxes (“horizontal equity”) and those with greater ability should pay greater taxes (“vertical equity”). Taxes can also be used to influence behavior of those who pay them; in choosing taxes, a common goal is to minimize the interference of taxes in the economic decisions of individuals and firms. Taxes should be simple, both to administer and to comply with because a complicated tax system wastes the resources of tax administrators and taxpayers. The next sections examine in detail the performance of the Indonesian tax system in achieving – or not achieving – these objectives.

The Indonesian tax system generates inadequate tax revenues.

The most immediate and pressing problem with the Indonesian tax system is its inability to raise adequate revenues. Despite the many significant tax reforms that have been implemented over the years, the ratio of taxes to GDP remains low and stagnant, and is even declining. The failure to collect adequate revenues has a range of negative consequences, notably that Indonesia cannot finance its urgent development needs and cannot reduce its persistent fiscal deficit.

Evidence for this conclusion comes from several sources and indicators, as discussed in detail earlier. First, Indonesia’s Tax/GDP ratio is low by international standards, averaging around 12% in recent years, with a noticeable recent decline. Second, after controlling for various explanatory variables using regression analysis for a large data set of developing countries around the world, Indonesia’s tax effort is roughly 50% lower than international benchmarks would predict. Third, the current Tax/GDP ratio is too low relative to Indonesia’s desired spending levels and the fiscal deficit.

Reasons for this under-performance are several, especially the existence of large amounts of tax evasion and various administrative decisions on the tax base of the CIT and the VAT, as discussed later.

In summary, Indonesia’s overall level of tax effort is well below international norms. Indonesia’s tax effort could be up to 4-5 percentage points of GDP higher than it is now, and this ratio could be significantly higher if Indonesia were to address many of the structural causes for low tax effort. Of course, the level of tax effort for Indonesia is fundamentally a political decision that very likely needs to be addressed in the context of comprehensive tax reform, but it seems evident that the Tax/GDP ratio is lower than most observers in Indonesia believe is desirable or sustainable.

There are large amounts of tax evasion, especially in the PIT.

One reason for the low level of taxes is tax evasion. By most all accounts, there are large amounts of income that escape taxation in Indonesia. Even so, solid evidence on evasion is difficult to find. One indicator of tax evasion is the size of the so-called "underground economy" or "shadow economy," commonly defined as all market-based goods and services, legal or illegal, that escape inclusion in official national income and product accounts. Estimates of the size of the Indonesian "underground economy" are quite large. Alm and Embaye (2013) estimate that the size of the Indonesian underground economy averaged about 33% in the 2000s, down from an estimated 50% two decades earlier; using the same methodology, the current estimated Indonesian shadow economy is 35.7%. Other estimates (Schneider, 2005; Schneider, Buehn, and Montenegro, 2010) indicate a similar size. Overall, these estimates suggest that the Indonesian shadow economy is comparable to, if slightly larger than, estimates for lower and upper middle income countries. See Table 4.

TABLE 4 *Shadow Economy Estimates (as percent of GDP): Summary Statistics by Income Group, 1984-2006*

Income Group	**Observations**	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Low Income	621	38.2	10.3	20.5	85.8
Lower Middle Income	572	37.2	10.3	17.5	84.5
Upper Middle Income	395	33.4	7.2	21.3	68.2
High Income, Non-OECD	118	24.3	7.1	14.1	44.1
OECD	475	16.9	3.6	10.4	30.3
All Countries (Unweighted)	2181	31.7	12.0	10.4	85.8
Indonesia	***23***	***39.8***	***10.4***	***57.2***	***27.3***

Source: Alm and Embaye (2013).

Another indicator of evasion is the number of registered and tax-filing taxpayers. According to discussions with officials in the Ministry of Finance, there are in 2017 about 35 million registered taxpayers, of whom only 10 million actually file returns. This is in a country with an estimated number of potential taxpayers of 165 million people in an overall population of nearly 270 million people. Still another is the amount and extent of bribery undertaken by Indonesian firms to reduce the cost of taxes (and regulations). Kuncoro (2004) uses a randomized survey of 1808 Indonesian firms in the agribusiness, manufacturing, and service sector across districts in 2001, and finds that two-thirds of the respondents paid bribes to government officials that averaged 10.8% of annual production costs.

The recently completed tax amnesty also provides some relevant indicators. A tax amnesty is a "grace" or "forgiveness" period, in which individuals are given an opportunity to pay previously unpaid taxes without being subject to the financial penalties and/or the criminal prosecution that the discovery of tax evasion normally brings. The Indonesian "Tax Amnesty Bill" (*RUU tentang Pengampunan Pajak*, No. 11/2016), along with the implementing regulations, became effective 1 July 2016 and ran until 31 March 2017. The amnesty was intended to encourage individuals to return to Indonesia assets that they had been keeping overseas, and to report assets that they had been keeping in Indonesia but that they had not reported to the tax authorities; in both cases, individuals would then pay a "tariff redemption rate," or penalty, on these assets, but at a lower rate than would typically apply. The tax amnesty was widely seen as successful in getting individuals to return foreign-held assets to Indonesia and in getting individuals to report assets held in Indonesia to the tax authorities. In total, the Ministry of Finance reported that Rp. 4,866 trillion of previously unreported assets were declared to the tax authorities, with about three-quarters of these reported assets coming from domestic assets and most of the foreign assets coming from a single country (Singapore). Even so, the additional tax payments (the "tariff redemption rate") were lower than anticipated, or Rp. 114 trillion in actual amounts versus Rp. 165 trillion in anticipated amounts. Further, only 966,000 taxpayers participated in the amnesty, much lower than the anticipated 2 million taxpayers. Overall, then, the amnesty highlighted the very small number of registered taxpayers and the very small number of registered and tax-filing taxpayers, relative to the number of potential taxpayers and the overall population in Indonesia.[13]

There are various possible reasons for the extent of evasion, although it must be acknowledged that firm evidence is not always available here. First, the information technology currently used in tax administration seems outmoded and obsolete, not reflective of the latest computer technology used in other countries to track individuals and their incomes. Second, enforcement of the tax laws seems erratic and unfocused. There are limited numbers of detailed field audits, and the audits that are conducted do not appear to be targeted at low-compliance sectors and individuals. The ability of the tax administration to conduct detailed field audits also seems limited, due to resource constraints. Third, the ability of the tax administration to track individuals and their incomes is limited by difficulties in gaining access to third-party information, especially financial information, and another contributing factor here is the absence of a uniform, nation-wide taxpayer identification system. Fourth, empirical evidence suggests that the complexity of the tax system likely reduces compliance of individuals and firms (Alm et al., 2010); this same evidence also indicates that providing enhanced services that make it easier for individuals and firms to pay their taxes would likely improve compliance and that simplifying the tax system would also make it easier to pay taxes. Fifth and finally, empirical evidence also indicates that a lack of trust in government likely contributes to non-compliance (Feld and Frey, 2002; Wahl, Kastlunger, and Kirchler, 2010; Karakostas and Zizzo, 2016). If individuals do not believe that the payment of their taxes will lead to improved government services, they are less likely to comply with the tax laws. The perception of government corruption has especially corrosive effects on tax compliance (Alm and Liu, 2017), and government policies like tax amnesties can contribute to the perception that non-compliance may (eventually) be forgiven (Alm, Martinez-Vazquez, and Wallace, 2009). Existing evidence from

[13] In fact, the experience of the Indonesian amnesty highlights some of the limitations of tax amnesties more generally; that is, the empirical evidence from the many tax amnesties that have been enacted around the world in the last several decades indicates that the benefits of a typical tax amnesty are generally small (e.g., an immediate increase in tax revenues, an improvement in voluntary compliance through better post-amnesty recordkeeping and monitoring of individuals who previously were not on the tax rolls), and that the costs are also generally small (e.g., a decline in voluntary compliance from previously honest taxpayers who view the amnesty as unfair, from individuals who are now less motivated by guilt to pay their taxes, from individuals who are now aware of the presence of noncompliance, from taxpayers who now realize that the government is unable to enforce the tax laws, and from taxpayers who anticipate that another amnesty may be given in the future), unless the amnesty is repeated over and over. See especially Alm, McKee, and Beck (1990) and Alm and Beck (1993), who show that the immediate revenue impact is often small and that the long-run revenue impact is also generally small.

around the world, based on naturally occurring field data, field experiments (natural and controlled), and laboratory experiments, on what motivates individuals and firms to pay taxes generates conclusions largely consistent with the Indonesian experience.[14]

The CIT tax base has been reduced by the administrative choice of various CIT features, especially a high SME threshold and numerous fiscal incentives.

The CIT tax base in Indonesia has been narrowed by various administrative decisions. An especially important tax base erosion is via the choice of a very high registration threshold for small- and medium-enterprises (SMEs) in the CIT. The existence of a "simplified tax system" (STS) specifies that SMEs with a total annual gross turnover from all business activities of less than Rp. 4.8 billion are eligible for the SME tax regime. Under this SME tax regime, eligible taxpayers are taxed at 1% of their gross turnover, not on their taxable profits under the normal regime. The SME tax regime is estimated to affect about 3 million taxpayers. At present, income tax revenues from this regime account for less than 1% of total tax revenues. If fully taxed under the standard CIT regime, the Ministry of Trade, Industry, and Cooperatives estimates that potential revenues are around Rp. 9-10 trillion.

As discussed in detail by Bird and Wallace (2004) and Thuronyi (2004), many countries use some form of STS for some taxpayers, in which the desired base for taxation is not itself measured but is instead inferred from some simple indicators that are more easily measured than the base itself. Such "presumptive tax systems" are used for a variety of reasons, mainly to reduce the compliance costs on taxpayers by making it easier for these taxpayers to compute their tax liabilities and to simplify tax administration by removing some taxpayers (usually those with small tax liabilities) from the tax rolls and by providing more obvious and more direct measures of tax liabilities. They may also be used to improve tax equity by providing more objective indicators of tax assessment, to reduce corruption by eliminating official discretion in assessing tax liabilities, to encourage taxpayers to keep better accounts in order to provide documentation that may reduce their presumptive tax liabilities, and to improve incentive effects when, say, income above the presumptive level is not subject to taxation. The introduction of these systems is also often driven in part by the desire to create a favorable environment for

[14] See Alm (2019) for a recent and comprehensive survey of the tax evasion literature.

small-scale activities. However, there are several problems that have been identified with many STSs.

One problem relates to the incentives created by the STS. A STS is intended to reduce the burden on small taxpayers. However, this means that the compliance cost of taxes should be reduced and not necessarily that the overall tax burden must be reduced. Indeed, the overall tax burden under the two alternative regimes should be broadly similar, in order to avoid creating artificial incentives to enter the STS purely to avoid paying one's taxes. A STS further distorts incentives facing taxpayers, by giving individuals and firms at the threshold an incentive to fragment their operations in order to fall below the STS threshold and to avoid any growth in turnover that would move the taxpayer above the "notch" and into the regular tax system.

A related problem is the choice of the STS threshold. These thresholds are based upon turnover and/or upon employee size, and only individuals and legal entities that do not exceed these thresholds are eligible for STS status. The establishment of appropriate levels for these thresholds is a crucial design feature. A threshold that is set too high will undermine the regular tax system because too many agents will opt for the reduced rate of taxation in the STS; a threshold that is set too low will fail to achieve the goal of simplification for many small taxpayers, thereby imposing compliance costs on many for whom the intent was to make their tax calculations much less burdensome. In Indonesia, it is widely believed by government officials that the CIT threshold has in fact been set far too high, and so that the STS represented by the 1% gross turnover tax likely includes viable and ongoing enterprises that are fully capable of being taxed under the regular tax regime. Indeed, there is little question that many firms are in the simplified tax system even though they likely keep detailed financial records and are fully capable of paying regular taxes. A related issue is that there is no apparent mechanism by which taxpayers "graduate" to the regular tax system, except when they exceed the thresholds. In many countries, there is a maximum limit on the number of years that a taxpayer can participate, even taxpayers that meet the formal eligibility requirements. However, there do not seem to be such graduation provisions in Indonesia. Finally, any threshold must be revised periodically in light of changed economic circumstances (e.g., inflation, economic growth), and these adjustments have not typically been made in Indonesia.

Further, according to government officials, there is little verification that those taxpayers who elect to be taxed under the STS are in fact legally eligible for such participation. This suggests that many participants have illegally moved to the lower cost tax system.

Finally, the STS contributes to horizontal and vertical inequities in the tax system. Firms with equal "true" income are taxed very differently if one is subject to the regular tax system and the other is in the STS.

These types of problems have led many countries to reform their STSs. Best-practice reforms include such actions as ensuring that the tax burdens under a STS and under the regular tax system are comparable, by reevaluating turnover thresholds (so as to ensure that only "small" taxpayers are eligible for a STS), by adjusting the thresholds for inflation and other changing economic circumstances, and by improving enforcement of a STS to ensure that firms who participate are in fact eligible (Bird and Wallace, 2004).

In addition to the special tax regime for SMEs, the CIT has been reduced by widespread and generous use of fiscal incentives. In principle, the possible benefits to a country that offers incentives include the increases in investment, the gains from industrialization, the creation of jobs for persons who otherwise would be unemployed or employed at lower wages, the transfer of technology and training, and the increases in revenues from taxes to which the incentives do not apply or from taxes payable after the initial reduction has ended. As for the costs, there is the obvious immediate loss of revenue, the distortions in investment behavior from investments that are socially unproductive, administrative complications, political discord generated by favors to foreign-owned corporations, and discrimination against smaller domestic firms that lack the resources and/or the influence to apply for the incentives.

Given these considerations, it is important to consider – and quantify – the benefits and costs of incentives. However, it is striking that a detailed and systematic assessment of the impacts of these Indonesian tax incentives has not yet been undertaken. Indeed, this lack of assessment is a problem that is common to most tax incentive schemes around the world. In the few instances in which countries have actually undertaken a rigorous analysis of these benefits, the benefits have typically been found to be positive but small and smaller than their costs.[15] [16]

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[15] See Thirsk (1991) for one of the few detailed studies of tax incentives in a developing country. This problem is not limited to developing countries. Fisher and Peters (2008) present a detailed critique of the lack of evaluation of economic incentives by state and local governments in the United States. In the few instances in which evaluation of the benefits and costs of incentives actually takes place, the evidence clearly indicates that the benefits fall far short

Overall, there is very little evidence that incentives are able to attract or to induce investment that would not have been undertaken anyway (Hines, 2010; Feld and Heckemeyer, 2011; Dharmapala, 2014). Indeed, these studies tend to show that the best way to encourage investment is to provide a stable political environment. As for tax policy, there is also some evidence from these same studies that the appropriate policy is to lower the overall tax rate in the corporate income tax, keeping a country's tax rate in line with other neighboring countries and avoiding the temptation to offer targeted incentives. In large part, this "best-practice" policy reflects the increasing evidence that the main effect of incentives is on the transfer of income across jurisdictions (via such mechanisms as transfer pricing and financial policies) rather than on the location of real activity across jurisdictions. In short, the main messages of this research are that incentives can stimulate investment but a country's overall political and economic characteristics are much more important than any incentives package both for the success or the failure of industries and as potential "drivers" of investment decisions by long-term investors. Moreover, even if/when incentives stimulate some additional investment, they are not generally cost-effective; that is, there is virtually no credible evidence that a tax incentive will pay for itself in terms of additional revenues. Again, this is not to deny that incentives can affect the movement of capital, broadly defined. It is to question whether any such movement represents a transfer of "real" economic activity as opposed to simply a transfer of "paper" transactions that reduce a firm's tax liabilities without generating any real economic activity. It is also to question whether the benefit-cost ratio of any such incentive is greater than one.[17]

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of the costs. For example, see Bartik (1991) and, more recently, Peters and Fisher (2004) and Klemm and Van Parys (2011).

[16] Note that in the mid-1980s Indonesia eliminated all of its investment incentives as part of a comprehensive tax reform (Gillis, 1985). The reasons for this were several. There was much evidence that few if any incentives had the desired effects. All they had accomplished was a massive loss in tax revenues. Further, although investment may have been attracted, this investment was not on balance beneficial to the Indonesian economy. The administrative problems associated with the tax incentives were also enormous, especially for tax holidays. The presence of tax incentives for some groups of taxpayers required higher tax rates on other non-favored taxpayers, and these taxpayers lobbied for their own special treatment. Finally, smaller firms did not generally receive tax incentives, and these firms had been an important source of job growth in Indonesia. On balance, these costs were deemed to be far in excess of the potential benefits. In particular, there was little evidence that the incentives were more important to potential investors than such factors as political stability, potential market size, economic growth, or infrastructure. The result in Indonesia was that the best policy for investment was deemed to be a reduced rate of taxation in the corporate income tax. However, over time these incentives have been added back to the Indonesian tax code.

[17] Recent empirical studies by Hines (2010), Feld and Heckemeyer (2011), and Dharmapala (2014) conclude that investment incentives should generally be avoided as part of any attempt to encourage investment and attract foreign investors. However, if incentives are to be used, this research also suggests several main guidelines for their use:

- ***Rationalize investment incentives***, where "rationalize" means the adoption of schemes in which the

Revenues from the VAT have been reduced by the administrative choice of various VAT features, especially a low tax rate, a high threshold, and numerous exemptions, as well as by poor compliance with the VAT.

Revenues from the VAT fall significantly below its potential, for several reasons. A major reason relates to various administrative decisions in the design of the VAT. The standard VAT tax rate in Indonesia is low by international standards, as discussed earlier. Moreover, the VAT tax base in Indonesia has been significantly narrowed by various administrative decisions. An especially important tax base erosion is via the choice of a very high registration threshold for the VAT, at Rp. 4.8 billion of gross turnover. A high VAT threshold can be justified by the desire to eliminate from the tax many small businesses, both to reduce the burden on these taxpayers of calculating the tax and also to reduce the burden on the tax administration of collecting the tax from a small business whose tax liability will be correspondingly small. However, the Indonesian threshold is exceptionally high. Indeed, one needs to look hard to find such a high turnover threshold for the VAT elsewhere, and it is common practice to have a low threshold or none at all. Relative to GDP per capita, Indonesia has the highest ratio of VAT threshold to real GDP per capita in the world.

A related VAT administrative choice is that there are numerous exemptions for goods and services. The exemptions for goods include many food items, mining and drilling products, food and beverages served in hotels and restaurants, and money, gold, and securities; the service exemptions include transportation, medical services, social, banking and insurance, education, art, and entertainment, and the like. In addition, Article 16B of the VAT Law No. 8/1983 allows the government to temporarily or permanently exempt certain goods and services, and to partially or fully reduce their tax burden through an implementing government regulation. As documented by the World Bank (2015), Indonesia is exceptionally generous in its exemptions.

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scheme does not alter the relative ranking of eligible projects, even though it makes all eligible projects more profitable;

- ***Use "performance-based incentives" that are linked to investment***, such as investment tax credits, investment allowances, and accelerated depreciation (especially full expensing);
- ***Avoid the use of tax holidays***, whose effectiveness has seldom been demonstrated;
- ***Define clearly the types of activities that will receive incentives and then grant these incentives automatically***, minimizing discretion, delays, negotiation, and corruption;
- ***Permit unrestricted entry of foreign investment***.
- ***Do not favor foreign over domestic investors***, because differential treatment is unfair to national entrepreneurs, it encourages questionable joint ventures, and it discourages the development of a national entrepreneurial class.

VAT revenues have also been reduced by poor compliance with the VAT. The number of firms registered for the VAT falls significantly short of the total number of firms that operate in Indonesia. This shortfall is due in part to administrative decisions on the registration threshold. It is also due in part to outright tax evasion.

An indication of the magnitude of VAT base erosion from these various considerations is the VAT "C-efficiency," which compares the actual VAT collections to collections if the standard VAT rate was applied to all domestic consumption; that is, C-efficiency is calculated as [Actual VAT Collection/(Total Consumption X Standard VAT Tax Rate)].[18] The Indonesian measure of C-efficiency has increased from 46% in 2001 to 58% in 2014, with a decline in 2014 from 2013. Relative to other countries, Indonesia's C-efficiency of 58% compares favorably. However, recall that the ratio of VAT revenues to GDP in Indonesia is less than 4%, which is very low relative to many other countries. The high C-efficiency combined with the low tax-to-GDP ratio is consistent with a very large number of VAT exemptions. Note that VAT revenues could increase from 4% to 7% of GDP if the VAT was efficiently applied to total consumption even while maintaining the current VAT rate, where the potential revenue gain is calculated as [(1 – C-efficiency) / C-efficiency].

Note that C-efficiency can be decomposed into a "Policy Gap" and a "Compliance Gap" (Keen, 2013). This decomposition can be expressed as:

C-efficiency = [1 – Policy Gap] X [1 – Compliance Gap],

where the Policy Gap measures revenue loss due to administrative choices (e.g., tax expenditures) and the Compliance Gap measures revenue loss due to tax evasion. Recent work by Iswahyudi (2018) estimates that the policy and compliance gaps for the Indonesian VAT are roughly equal. Given that the C-efficiency equals 0.58, this implies in turn that each gap is roughly equal to 24%; that is, policy choices on the tax base reduce VAT revenues by 24%, and tax evasion reduces VAT revenues by another 24%. All of these estimates must be viewed with some caution, but they suggest that there is significant potential to increase VAT revenues.

There are significant limitations in tax administration.

A dominant theme in most assessments of the Indonesian tax system is the absence of effective tax administration, although it must be acknowledged that this assessment is based on

[18] See Keen (2013) for a detailed discussion of C-efficiency.

somewhat anecdotal evidence. One indicator of administrative efficiency is the extent of tax evasion. As discussed earlier, there are apparently large amounts of evasion in Indonesia, with a wide range of negative effects. Other problems with the tax administration stem from the tax structure: the tax base has been narrowed by preferences, the system is overly complex, especially in its use of fiscal incentives, and over time the rate and base structures have become more and more complex, as discussed next. The structural and administrative problems are clearly related. Complexity in the rate and base structure makes administration more difficult and also reduces the compliance rate. A vital issue in tax administration is the ability to conduct field audits. Such audits seem largely absent from the Indonesian tax system (International Monetary Fund, 2014; The World Bank, 2016a, 2016b). In the absence of effective audits, the effectiveness of any move toward self-assessment is likely to be compromised. Further, the absence of effective audits makes it especially important to have in place a comprehensive system of withholding.

The tax system is excessively and unnecessarily complex.

The limitations in tax administration are magnified by the overly complex tax system. Over time, the tax system has been adjusted to raise revenue, or to respond to requests for more favorable tax treatment, or to promote specific activities, or to redistribute income, or to protect the poor. Each of these changes complicates the tax system. Complexity in turn leads to higher administrative costs, more arbitrariness in administration, and an increasing erosion of confidence in the fairness and effectiveness of the tax system. Taxpayers are not inclined to pay a tax that they do not understand, that imposes high compliance costs, and that is administered by a tax administration that is viewed as arbitrary and ineffective.

There are numerous elements that complicate the tax system. Sometimes complication is a by-product of well-intentioned adjustments to the tax structure (e.g., the exemption of the purchases of items consumed by lower income individuals). Still, there are areas where the system is needlessly complex. Clearly this is true for the CIT, especially in its heavy use of fiscal incentives. It is also true for some excises, given especially the maze of excise taxes on tobacco.

All taxes impose compliance costs on taxpayers and administrative costs on government. Taxpayer compliance costs include time spent keeping receipts, logging appropriate books, and filing tax returns. Administrative costs include assessment, audit, and collection. Some taxes are less expensive to administer and to comply with than other taxes. This is due to such factors as the complexity of particular tax laws, the familiarity of taxpayers with various taxes, the process by which taxes are collected, and the status of data collection, enforcement, and monitoring for the various taxes. For example, taxes that are subject to source withholding are less costly to administer than taxes that require individual filing.

It is difficult to quantify the costs of administration and compliance across countries. However, there is some work that has calculated these costs, using a variety of methods.[19] These studies demonstrate that there is substantial variation in the compliance and administrative costs across taxes and countries. Income taxes appear to be especially high in terms of administrative costs per dollar of revenue collected, with the more complicated the system the higher the cost. Broader-based taxes may be less costly to administer, but capital gains taxes are notoriously difficult to administer.

However, there are little systematic data on compliance and administrative costs in Indonesia, so it is not possible to directly compute these costs. Even so, it seems likely that Indonesia's tax structure is a high-cost one. There is a high reliance on direct taxes, there is much less use of taxes on international trade, the structure of the CIT in Indonesia is very complex, and there is extensive use of incentives. Some of these factors are easily justified; for example, low taxes on international trade encourage gains from trade, along with reduction in poverty generated by trade. Even so, these factors imply higher compliance and administrative costs than would be the case for a less complicated system and one that relies more on indirect taxes.

There are horizontal and vertical inequities in taxation, but these inequities do not seem to be quantified.

There is little question that the practice of taxation in Indonesia introduces significant vertical and horizontal inequities. Unfortunately, little is known about the overall fairness of Indonesia's tax system; that is, who pays taxes in Indonesia, and how does the tax system affect the distribution of income? This lack of precise information has not stopped a general perception that Indonesia's tax system is regressive.

[19] See especially Sandford (1995), Tran-Nam et al. (2000), and Evans (2001) for reviews of the empirical literatures. For more theoretical analyses of administration and compliance costs, see Slemrod and Gillitzer (2014) and Keen and Slemrod (2017). For recent attempts to estimate administrative and compliance costs in specific countries, see Evans and Tran-Nam (2014) for New Zealand compliance costs and Alm (2018) for administrative costs in Kuwait.

If a tax system is "fair," equally-situated individuals and companies will face the same tax obligations (i.e., "horizontal equity"). When this is not the case, some individuals will bear a heavier burden than others who have comparable means. This weakens confidence in the system, and may encourage some taxpayers to look for avenues of nonpayment that will have negative consequences for revenues. It also may lead individuals and companies to make different economic choices in order to capture tax advantages, which in turn leads to losses in efficiency.

Indeed, there are many sources of horizontal inequities in the Indonesian tax system. Individuals who work in the formal sector of the Indonesian economy are subject to employer withholding on their wage income, while those who are self-employed or who work in the informal sector are less likely to pay the PIT. The result can be very different tax burdens, even for individuals with the same "true" income. Also, individuals differ in their opportunities for tax evasion, especially between the formal sector and the informal sector. Some individuals receive non-taxable benefits from their employer while others do not receive them or receive them at a lower rate. Again, the result can be very different tax burdens for households with equal income. Further, some consumers face very different effective indirect tax rates than others, given the uneven pattern of exemptions on the excises. As for inequities in the tax treatment of business, the corporate income tax discriminates among firms, largely because of the existence of incentives and other tax preferences that are available to some firms, sectors, and asset types, and not to others. Also, in addition to the formal provisions for tax relief, there seems to be discretionary relief on a case-by-case basis.

The horizontal inequity that may be the most contentious in Indonesia is that between workers subject to income tax withholding and workers in the self-employed sector. Again, this factor contributes to an especially heavy burden on formal sector labor.

Another aspect of fairness in taxation is the tax treatment of "unequals." If a tax system is "fair," then individuals with greater ability to pay will pay greater amounts of taxes, as reflected in different effective tax rates by income class (i.e., "vertical equity"). However, these sources remain unexamined.

There are likely to be large efficiency costs of Indonesian taxes, but these inefficiencies do not seem to be quantified.

A commonly accepted notion about “good” tax policy holds that the tax system should raise revenues with minimal interference in the decisions of consumers and firms. When a tax leads individuals and business to change their decisions solely because of the existence of the tax, then the tax is said to impose an efficiency cost (e.g., an “excess burden”).

The system of taxes in Indonesia is likely to introduce a wide range of distortions in individual and firm behavior. For example, the CIT generates many distortions, perhaps more than any other tax in the system. Together with the extensive system of incentives, the CIT gives preferential treatment both to different types of investment and to different sectors, thereby leading firms to base their investment decisions mainly on tax considerations rather than on market forces. Further, the use of tax incentives to increase investment is a questionable and unproven practice. The high CIT threshold encourages firms to fragment their operations in order to meet the requirements, and the threshold itself creates incentives for firms to keep their level of revenues below the threshold, thereby discouraging growth and expansion. Similar efficiency considerations arise with the VAT threshold. The PIT also generates distortions: it discourages work effort, it reduces the return to savings, and it encourages individuals to move to the informal sector. Similarly, the simplified tax system leads to distortions. Unfortunately, there are no estimates of the overall efficiency cost of Indonesian taxes.

The current tax system has emerged as a result of short-term, ad hoc revenue measures without a longer-term “vision” for what a “good” tax system should look like.

Indonesian tax policy has, apparently and increasingly, become focused on short-term considerations of generating additional revenues. More fundamentally, the Indonesian tax system has failed to evolve to reflect the changing economic circumstances of governments in small, open economies. Back in the 1960s, the tax systems of most isolated governments were originally designed for a world in which production and consumption were primarily of *tangible goods*, in which the sale and consumption of these goods generally occurred in the *same location*, and in which the factors of production used to make the goods were for the most part *immobile*. In such a world, taxation was a straightforward exercise. Sales and excise taxes could be imposed on the tangible goods that were consumed, by the government in the jurisdiction in which consumption (or production) occurred. Similarly, income and property taxes could be imposed on factors where they lived and worked without fear that taxes would drive the factors elsewhere. In making these tax decisions, a government in one jurisdiction had no need to consider how its actions would affect the governments in other jurisdictions because tax bases were largely immobile.

There is little doubt that the current economic environment changes things, and changes them dramatically. First, tax bases are significantly more mobile across countries. With integrated national and, especially, world markets, factors of production are obviously able to move more easily from one country to another. For example, businesses have more flexibility in choosing where to locate because communication and transportation costs have been slashed. Some forms of production activity require little in the way of traditional capital and labor, so that physical location becomes less important. Labor, especially skilled labor, becomes more mobile in this environment, and financial capital is able to flow quickly across national boundaries.

Clearly, if factors of production can move easily from one location to another, then the ability of a government to tax these factors is greatly diminished. A government that raises its tax rates above those of other neighboring and competing countries risks losing its tax base to these countries. Particularly in the case of income from capital, there is much speculation that taxation will become increasingly problematic. In fact, as noted earlier, there is now some emerging if still inconclusive empirical evidence that factors of production are responding to these types of tax considerations.

Increased mobility is not limited to factors of production. Consumers are also able to plan their consumption according to tax considerations, and consumption does not necessarily occur in the jurisdiction in which a taxpayer resides. A jurisdiction that attempts to tax, say, petroleum more heavily than in surrounding areas will find that consumers will purchase elsewhere. Similarly, many individuals can now purchase most types of products over the internet and thereby avoid paying some (or even all) sales taxes. Additionally, there has been increased consumption of services and intangible goods, both of which are much more difficult to tax than tangible goods. The once-tight link between the location of sales and the location of consumption is now quite loose.

Second, and relatedly, the measurement, identification, and assignment of tax bases are much more difficult. Consider a typical multinational business. The product that the firm makes may be designed in one or more jurisdictions; the firm may use inputs purchased in multiple jurisdictions; the product may be produced in several places and assembled in a still different location; and the final good may be sold in multiple locations. Because the business operates in multiple jurisdictions, the firm has considerable leeway to manipulate prices to minimize its tax liabilities. This latter problem is well known, but its severity has increased with the enormous expansion in the number of firms operating in multiple jurisdictions like Indonesia.

Likewise, consider an individual whose income comes from multiple sources. A global income tax requires that income from these sources be aggregated. However, it is easy for an individual to hide, say, interest income from multiple areas. In the absence of information sharing across governments in different countries, the ability of any government to identify incomes from other jurisdictions is quite limited.

Consider finally a consumer who can purchase goods and services in several different ways: from traditional local merchants or from company websites. In the former case, identification, measurement, and assignment of the tax base are straightforward. In the latter case, they are not. Application of sales taxes in this new environment poses considerable problems for governments.

How will governments respond to these various pressures, especially in their tax choices? Most importantly, globalization implies that the ability of any government to choose its tax policies independently of those in other jurisdictions is greatly curtailed. In the presence of mobile tax bases, a single government's choice of tax policies will have effects beyond its own borders and will be affected by the actions of other jurisdictions. In short, tax competition will increase, and this increase will have a number of effects: on the level of taxation, on the composition and form of taxes, and on the general strategies that a government can pursue in setting their taxes (Winner, 2005). However, Indonesia does not yet seem to have engaged this new reality in the reform of tax systems.

WHAT SHOULD BE DONE? TAX REFORM OPTIONS FOR INDONESIA

There is a clear case for separating between short-term and longer-term needs for tax policy reform in Indonesia. The following sections identify specific steps that should be taken in both dimensions.

Short-term Reform Options

For the short-term, the Government of Indonesia should enact tax policy measures that would target the collection of an additional 1% to 2% of GDP in tax revenues. However, it is important that the Government should avoid adopting short-term, ad hoc, and stop-gap measures that would compromise the longer-term goals of a simpler, fairer, and less distortionary tax system. Some measures that should be avoided include ad hoc measures designed only as a "quick fix" (e.g., tax amnesties, tax holidays), new exemptions driven by political considerations or by the hope that foreign direct investment may be encouraged, new withholding taxes, and changes in tax rates, except in the context of longer-term tax reform.

Note in particular that the government should avoid changing tax rates, with some possible exceptions as discussed below. The rate structures of the PIT and the CIT are comparable to international norms. The VAT tax rate is relatively low by international standards, and the basic rate could certainly be increased without creating competitive disadvantages for Indonesia. Still, the VAT tax rate is not very far out of line. The rate structures of these major taxes should be re-evaluated only in the context of the longer-term comprehensive tax reform. The government should also resist pressure in the short run to grant additional exemptions and special treatments. One way to free the Ministry of Finance from this continuous lobbying pressure would be to remove altogether any discretionary power of the Ministry to provide new exemptions and to require that explicit changes in the laws occur only after a careful process of evaluation and public discussion of each of these proposals. The proper weighing of this option should take place in the context of comprehensive tax reform in the longer-term. The government should also resist pressure to introduce additional withholding schemes. Withholding schemes in general help raise revenues, but this result needs to be weighed against the costs that they carry, including the unfair shifting of administration costs to taxpayers.

Potential short-term measures to enhance revenues and still protect longer-term goals include several specific actions.

(1) Reduce the SME threshold in the CIT. The CIT threshold for small- and medium-enterprises (SMEs) to be taxed under the simplified tax system for SMEs is very high, it reduces CIT revenues, it distorts firm behavior, and it leads to unequal treatment of otherwise similar firms.

(2) Reduce the threshold in the VAT. The VAT threshold is also extraordinarily high, with similar effects as the CIT threshold for SMEs.

(3) *Increase tobacco excise tax rates***.** There is some scope for increasing the tax rates on tobacco products, in ways that are consistent with longer-term tax reform (including simplification of the ungainly system of tobacco excise taxes) and with the general notion that the negative externalities from tobacco consumption justify higher tax rates. Even so, it should be recognized that it is unlikely that increasing excise tax rates would give a significant increase in revenues because most cigarettes in the top tiers are already close to the maximum allowable rate of 57%, and increasing tax rates above this level would require an amendment to the current Indonesian excise tax law.

(4) *Increase luxury goods tax rates.* There is some scope for increasing the tax rates on luxury goods in the LGST regime. Such increases have the potential both to generate revenues and to make the distribution of tax burdens more progressive. However, given the limitations in tax administration, these effects are likely to be limited.

(5) *Continue tax administrative reforms.* Many of these reforms must be part of longer-term reform actions. Even so, efforts should begin in the short-term (and continue in the longer-term) on:

- improving the use of the latest information technology in tax administration;
- increasing the number of tax audits;
- targeting audits on low-compliance sectors and individuals;
- initiating a uniform taxpayer identification system;
- expanding the use of electronic filing;
- increasing tax administration access to third-party information;
- improving tax administration infrastructure, equipment, data collection/analysis, and staffing;
- simplifying the tax laws;
- working to increase trust in the tax administration.

Indeed, one of the most important lessons in the reform of tax systems around the world is that a tax system is only as good as its tax administration. This is why many countries around the world have embarked on tax administration reform and modernization programs. The experience from other countries that have undertaken similar modernization efforts in tax administration shows that considerable persistence and focus is required for the final success of these reforms. This experience also shows that very rarely have these reforms produced significant revenue results in the short run. Instead tax administration modernization projects tend to bear fruit in the long run. Although these reforms are included as short-term options, their success requires sustained longer-term efforts.

Longer-term Reform Options

For the longer-term, the Government of Indonesia should initiate a comprehensive tax reform, which would implement structural reforms in the major Indonesian taxes and which would parallel and complement on the side of tax policy several ongoing comprehensive tax administration reforms. Addressing especially the problems of static and dynamic revenue inadequacy, of vertical and horizontal inequities, of the distorting effects of the many exemptions and special treatments, of administrative weaknesses, and the like, can only take place in the context of a comprehensive reform. See Box 3 for a discussion of international practices and lessons in comprehensive tax reform.

BOX 3 *The Lessons from Comprehensive Tax Reforms*

Over the past several decades, many developing countries have embarked in comprehensive tax reform efforts, often with positive results. An example is the comprehensive tax reform program introduced in Indonesia in 1983; the program during the six following years allowed, among other items, a substantial expansion of the VAT tax base to include all excisable goods and later on the inclusion of most service activities. Indonesia's reform replicated in many ways the steps of the comprehensive reform that took place in Korea in the 1970s. Another successful example is Jamaica's comprehensive tax reform of 1986. This reform yielded a substantial broadening of the income tax base. Prior to the reform, the income tax had a very narrow base due to numerous credits, exemptions, and other special treatments that had been granted over the years. The 1986 was successful in removing the credits and special treatments by introducing a higher standard personal deduction and a flat income tax rate. Other comprehensive tax reforms have implemented in Bolivia, Colombia, Malawi, Mexico, Russia, and Turkey.

These efforts suggest several main lessons from successful tax reforms around the world.

1. ***Comprehensive reforms are often better than piecemeal reforms.*** There are certainly risks that disaster can result when a system is shocked too much from a comprehensive reform. Even so, under many conditions comprehensive reform can work because: everyone recognizes that the system is broken; the government and the taxpayers need time to absorb the shock, and the time involved in the discussion of comprehensive reform often allows this; and there is also sufficient time for the tax administration to absorb the changes. More generally, comprehensive reform is often better than piecemeal reform because comprehensive reforms ensure: that the separate pieces of the reform fit together, so that the prices are "right;" that everyone gains – and everyone loses – from some or another specific change, which increases the political likelihood of passage; that everyone recognizes that the system of taxation is "broken" and needs to be "fixed;" that the momentum of reform is maintained; and that the gains (and losses) are large enough for taxpayers to see.
2. ***Second, timing is important.*** The best time for comprehensive reform is – paradoxically – often in bad economic times, since this ensures that everyone's attention is focused and that everyone recognizes the necessity of tax reform. The best time is also – not surprisingly – when there is no election looming.
3. ***In many instances, base broadening is consistent with adequacy, equity, and growth concerns.*** Base broadening can obviously increase tax revenues. The elimination of tax preferences and more generally the broadening of the tax base can also improve both vertical and horizontal equity by ensuring that the wealthy pay their "fair" share and that equals are treated equally. Finally, base broadening reforms can enhance economic growth by improving efficiency and by reducing the incentives for income shifting activities.
4. ***Empirical analysis is often difficult but is crucial, for determining the details of any reform and in selling any reform.*** Data are often problematic, even in the U.S., and, as we emphasized earlier, quantifying the winners and losers can mobilize the political opposition. Even so, it is essential to try to quantify the effects of tax reforms. Such quantification is especially crucial in determining the distributional effects of tax reforms.
5. ***The administrative dimension is important, but it is necessary first to get the policy "right" before dealing with administrative problems.*** After all, if the reform stops with administration (e.g., no-return filing), and leaves poor policy still in place, the result will still be poor policy.

6. ***Relatedly, reforms must consider both implementation and transition issues.*** Any major tax change can involve the creation of a new administrative structure. A comprehensive reform can have massive impacts on asset values. Any reform also creates transitional winners and losers. These transition issues cannot be ignored.
7. ***Tax reform should pay attention to the intergovernmental dimension.*** Most often, the reform effort focuses exclusively on the central government. However, fixing things at the central government while leaving in place poor tax policies at the subnational level will often compromise the goals of reform.
8. ***Tax reform must recognize the impact of globalization.*** Most current tax systems were designed for a world in which production and consumption were primarily of tangible goods, in which the sale and consumption of these goods generally occurred in the same location, and in which the factors of production used to make the goods were for the most part immobile. Globalization implies that tax bases are significantly more mobile; it implies that the measurement, identification, and assignment of tax bases are much more difficult; and it implies that the ability of any government to choose its tax policies independently of those in other countries is greatly curtailed. Such international issues must be incorporated in any tax reform discussion.
9. ***There is no one-size-fits-all tax reform.*** Any tax reform must consider the institutions, the traditions, the economic policies, and especially the politics of the current situation.
10. ***Tax reforms must recognize and balance the tradeoffs.*** Any reform must balance adequacy considerations with equity considerations and with growth/efficiency considerations.

Sources: Bahl (1991); The World Bank (1991); Martinez-Vazquez and McNab (2000); Barbone et al. (2002); Owens (2006); and Alm and Sheffrin (2013).

The starting point in any comprehensive tax reform is to complete a tax reform study, one that would parallel and complement any ongoing administrative reforms. Therefore:

> *Undertake systematic studies that will lead to reform of the entire Indonesian tax system by establishing a broad-based, low-rate tax system.*

The intent here is raise the Tax/GDP ratio over the longer-term to roughly 20%, as well as to improve fairness, reduce distortions, improve tax administration, simplify taxes, provide better taxpayer services, improve taxpayer trust in government, and the like.

Without pre-judging the outcome of this reform study, a comprehensive reform will likely need to consider the following actions:

(1) *Consider moving the PIT from a global income tax to a schedular income tax.* Global income taxes have long been viewed as the goal toward which the PIT should move, and there are clear benefits from a global income tax. However, it is increasingly recognized that a global tax is difficult to administer in a small, open, and developing economy like Indonesia; it is especially difficult for any country to tax capital income (Gordon, 1992). A schedular income tax is one alternative that maintains a PIT but that allows it to be more easily administered; the ability to collect taxes by employer source withholding is especially helpful in generating tax revenues. As a possible alternative to a schedular income tax, a "dual income tax" may be an option that maintains taxation of capital income along with taxation of labor income (Sørensen, 2005; Genser and Reutter, 2007; Bird and Zolt, 2011).

(2) *Expand the CIT tax base by modifying the SME tax system and reducing fiscal incentives.* Many countries no longer distinguish between small- and medium-enterprises and the larger enterprises subject to the regular CIT. Many countries are also finding that investment is best encouraged by lower overall CIT tax rates, rather than by special investment incentives. For

those countries that retain fiscal incentives, the evidence is clear the investment-based incentives are more effective than tax holidays in encouraging investment.

(3) *Expand the VAT tax base by maintaining a lower VAT threshold, reducing exemptions, and expanding the VAT to currently untaxed products, including untaxed services.*

(4) *Simplify the PIT, the CIT, the VAT, and tobacco excises.* Tobacco excises are especially complicated and require significant reform and simplification.

(5) *Increase tax rates in the VAT, tobacco excises, and the LSGT tax regime.* In each case, there are compelling reasons for higher tax rates.

(6) *Continue the short-term reforms of the tax administration.* The short-term reforms are largely intended to improve tax compliance, and these reforms should continue in the longer-term. In this regard, the lessons of administrative reforms in other countries have useful lessons on how to improve compliance (Alm, 2019). These reforms have certainly included better enforcement policies (e.g., an "enforcement paradigm" for tax administration), especially more audits, better targeted audits, better access to third-party information, improved taxpayer identification, increased electronic filing, and the like. However, it is increasingly the case that tax administration reforms have emphasized both the delivery of improved services to taxpayers (e.g., a "service paradigm") and also the fostering of an improved culture of taxation (e.g., a "trust paradigm"). These latter two aspects of administrative reforms are consistent with new perspectives on what motivates tax compliance. All of these reforms require additional resources for the tax administration.

There is no question that this process is not a simple one. There is also an underlying question on what should "come first," administrative reform or policy reform? It is certainly plausible that it is first necessary to get tax policy "right" before dealing with tax administration, as indicated by the discussion in Box 3. However, it is also plausible that this approach of putting policy ahead of administration is misguided, given that it may well be more difficult and more time-consuming to change how things are done (e.g., administration) than to change things (e.g., policy). These considerations suggest that it may be better to consider policy and administration jointly and together, dealing with both as a whole.[20]

In any event, there are now world-wide examples of successful comprehensive reforms. This process of reform now seems to be underway in Indonesia. It remains to be seen whether this process will be successful in reforming the Indonesian tax system.

[20] I am grateful to an anonymous referee for emphasizing this point.

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