



Determinants of Effective Tax Administrations: Lessons from International Experience for Indonesia

Amr Hosny

International Monetary Fund, 700 19th Street, N.W., Washington, D.C. E-mail: abosny@imf.org

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Abstracta: The elected administration in Indonesia has pledged to raise the total revenue by 10 ppts from 13 percent of GDP, including by establishing a new National Revenue Agency (NRA) and enhancing revenue collection processes. A survey of the literature suggests that independent revenue agencies need not be viewed as a panacea, and that sustained revenue administration reforms and modernization are persisting processes. Key factors to effective revenue administrations include compliance risk management, use of third-party data, digitalization, appropriate staffing, and broad taxpayer bases is critical.

Keywords: tax administration, Indonesia, independent revenue agency

Introduction

The elected administration has pledged to raise total revenues, including by establishing a new National Revenue Agency (NRA) and enhancing revenue collection processes. The focus on domestic revenue mobilization is welcome. Revenue-to-GDP ratio in Indonesia is lower than peers, and raising it – as pledged – by 10 ppts from around 13 percent of GDP is an ambitious and significant step in the right direction.

The current institutional structure of Indonesia's tax administration is a directory within the Ministry of Finance, focusing on taxes; this is similar to peers. Per the International Survey on Revenue Administration (ISORA)¹, tax institutional arrangements are typically grouped into (1) directorate(s) within the Ministry of

Finance or its equivalent, or (2) semi-autonomous bodies² with or without a management board. Semi-autonomous bodies are generally established to provide increased autonomy in human resources and budgeting matters, and to afford some level of insulation from political interference. In addition, there are two basic types of tax administration in terms of main responsibility areas: (1) those in which tax and customs administrations are separate organizational entities and (2) those in which tax and customs administrations are managed in

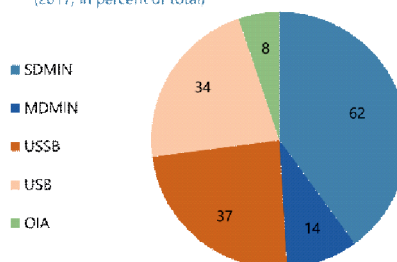
the same organization (Crandall 2010, OECD 2019, ADB 2020, Crandall et al 2021, ADB 2022). The institutional arrangement in Indonesia's tax administration – the Directorate General of Taxes (DGT) – is single directory within the Ministry of Finance, covering tax administration only, like in the majority of arrangements worldwide (40 percent) and in ASEAN (above 50 percent). The ADB (2020) provides similar evidence where the semi-autonomous structure is more common in Africa and South America than in Asia. In terms of organizational design, most countries have a hybrid form largely based on functional (e.g. audit, returns and payments, collection, taxpayer services) and taxpayer segment (e.g. large taxpayers office) design criteria (Kidd 2010, WB 2010).

Analysis: The International Experience

Integrated revenue systems should not be viewed as a panacea; the literature points to difficulties in quantifying its costs and benefits. Kidd and Crandall (2006) and Crandall (2010) argue that independent revenue authorities should not be viewed as a panacea; creating such an agency may be expensive, take a long time and may not necessarily improve effectiveness. Before considering any particular governance model, revenue administrations should clearly identify and

Tax Institutional Arrangements

(2017, in percent of total)



Notes: Single directory within ministry of finance or equivalent (SDMIN); multiple directories within ministry of finance or equivalent (MDMIN); semi-autonomous unified bodies with supervisory board (USSB); semi-autonomous unified bodies (USB); other institutional arrangements (CIA).

Sources: Calculations based on ISORA 2018.

Tax Arrangement, by Responsibility

	Semi-autonomous	Within ministry	Other	All
Tax only	32	61	6	99
Tax and customs	39	15	2	56
All	71	76	8	155

Source: ISORA 2018

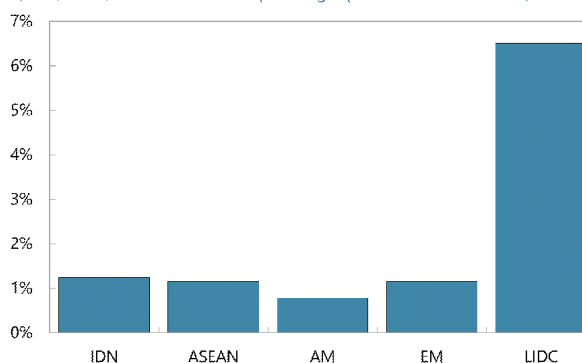
articulate problems and deficiencies and assess the extent to which each model might resolve these. Political commitment is, in any case, vital in sustaining an effective revenue administration. The aforementioned studies further argue that an independent agency model alone need not lead to improved effectiveness and/or taxpayer compliance. In a comparative study of international country experiences of integration of revenue administrations, WB (2010) notes the inability to provide systematic or quantifiable cost-benefit analysis of revenue system integration, including because of the difficulty to disentangle cost and/or benefits from integration versus parallel and ongoing modernization efforts as well as other macroeconomic and structural factors.

Modernizing tax and customs administrations – even if integrated – is a long-term and persisting process. The rationale for merging tax and customs administrations is the expected administrative synergy and economies of scale of combining operational functions to improve revenue collection and services (Crandall 2010, WB 2010). That said, the WB (2010) also highlights the importance of understanding that institution building within an integrated revenue authority is a long-term goal and requires persistent effort even after the integration is largely accomplished. Kidd and Crandall (2006) further argue that modernization of revenue administrations is ultimately the result of improvements in organizational structures, systems, and processes. A move to implement a new governance model for the revenue administration can thus only be, at best, a first step. Along similar lines, Adan et al (2023) report empirical evidence that while tax administration reforms may lead to some initial gains, it could take time for the full results to be realized.

Tax administration in Indonesia is relatively efficient compared to peers. We use the “cost of collection” as a proxy measure of a tax administration’s efficiency, following OECD (2019). This indicator is computed as the annual operating expenditures of a tax administration as a share of total net revenues collected.

Cost of Collection

(2017, share, tax administration operating expenses to total revenues)



Sources: Calculations based on ISORA 2018

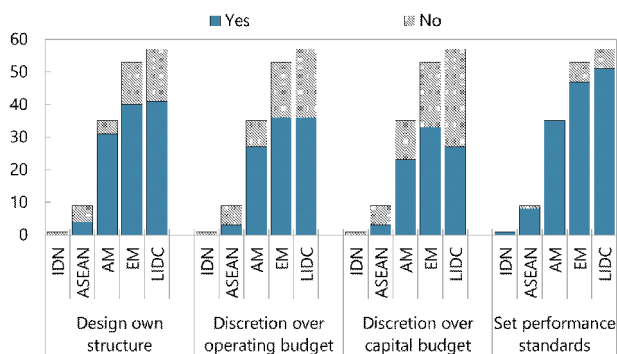
The ratio compares inputs (administrative costs) to outputs (revenues), although there are caveats (i.e. other factors that can influence the ratio such as tax policy or macroeconomic changes, differences in tax structures, and/or differences in range of functions and revenues administered). In Indonesia, this ratio is about 1.8 percent, in line with the ASEAN and EM average, albeit slightly higher than that of advanced markets (AMs).

The practices and characteristics of tax administration agencies matter significantly for tax performance; key factors include rigorous compliance risk management, use of third-party data, digitalization, autonomy and appropriate staffing. The operational strength of the agency generally comprises compliance risk management (CRM) practices, the use of third-party data (TPD), degree of digitalization of services, service orientation, public accountability, and autonomy. Chang et al (2020) and Adan et al (2023) find empirical evidence that such factors are tightly associated with tax collections. Regardless of the institutional arrangement in place, the literature has identified several factors that are ultimately key to an effective revenue administration. Lessons include:

Good practice stipulates that revenue administrations have adequate autonomy over their decisions. Revenue bodies should have adequate autonomy, particularly in designing their organization, devising plans and objectives, managing budgets, and dealing with important human resource management matters (ADB 2020). Stronger autonomy

can reduce management impediments while maintaining accountability and transparency (Crandall 2010). Using data from the ISORA 2018 survey, Indonesia's DGT does not report having discretion in designing its own structure, or over its operating budget, or over its capital budget. The DGT, however, does have autonomy to set its performance standards (for example on processing tax returns and refunds, collection, audits, and resolving disputes). While this set-up is slightly more common in ASEAN countries, most other countries (including by all income

Authority of the revenue administration
(2017, number of countries)



Sources: Calculations based on ISORA 2018.

levels) report having relatively more authority on such decisions. This is noticeably the case for countries with semi-autonomous structures (ADB 2020). The DGT also prepares and publishes an annual report, as in most countries.

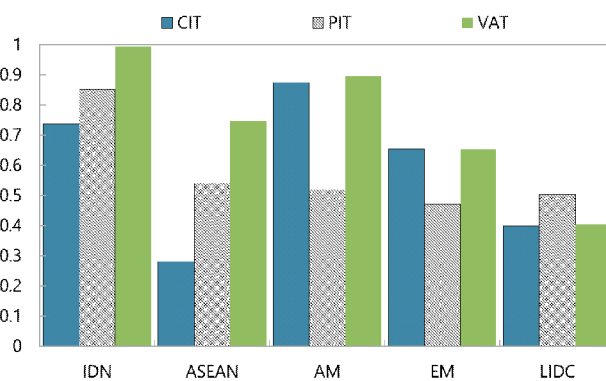
Digitalization of tax administration services is especially relevant.

For instance, Nose and Mengistu (2023) find a strong empirical association between digital tax administration operations and improved revenue collection outcomes. They also find that realization of revenue gains is heavily contingent on accompanying policies, legislative and administrative reforms, and the availability of adequate digital connectivity and capable tax administration staff. In Indonesia, according to the ISORA 2018 survey, the share of tax returns filed online (a proxy for digitalization) is quite high, performing notably better than peers. The ADB (2020) reports similar evidence with a focus on Asian countries.

Amongst sound practices of tax administration, CRM and the use of TPD are particularly important.

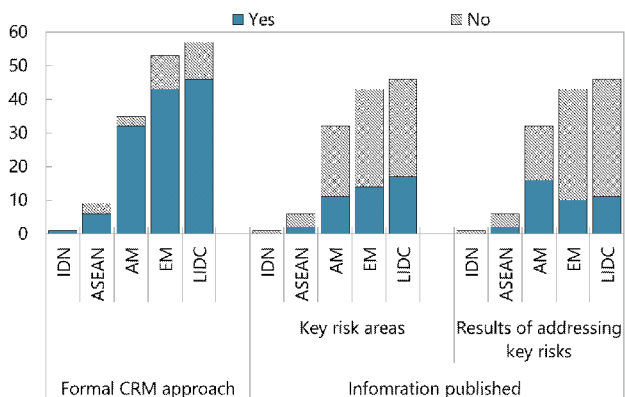
To enhance tax collection, tax administration reform efforts should prioritize: (i) strengthening CRM including by adopting automated risk profiling and electronic audits; and (ii) utilizing TPD by adopting computer systems for processing the data and prefilling returns (Chang et al

Share of returns filed online
(in percent of total, 2017)



Sources: Calculations based on ISORA 2018.

Compliance Risk Management Approach
(2017, number of countries)



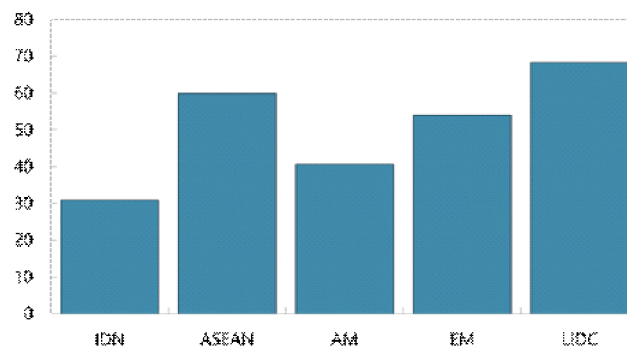
Sources: Calculations based on ISORA 2018 and ADB (2020).

2020). Indonesia, as several peers, has a formal CRM approach, covering return filing, payment processing, collection enforcement, verification/audit and taxpayer services. The DGT does not publish key risk areas or results of addressing them publicly, as in several peers. The ADB (2020) reports similar evidence with a focus on Asian countries.

Adequately staffing tax administration agencies is important. For instance, Chang et al (2020) find empirical evidence that increased staffing of a tax agency is associated with improved revenue performance up to a threshold of 0.25 percent of the labor force.

The above factors are highly correlated (Chang et al 2020 and Adan et al 2023). This aligns with advice to countries that tax administrative reform benefits derive from the strategic integration of multiple components, rather the implementation of individual measures. For example, it is the effective operation of an office or

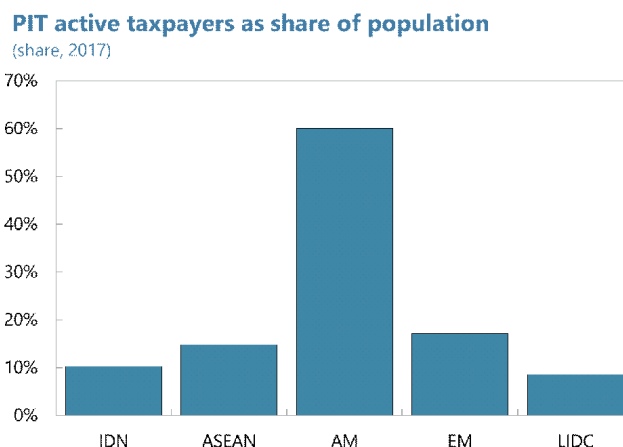
Share of LTO in Total Revenues
(Share, 2017)



Notes: Bars represent actual or estimated percentage of net revenue administered under LTO in relation to total net revenue.
Sources: Calculations based on ISORA 2018

program for large taxpayers that matters, rather than the establishment of such an office or program (Chang et al 2020). Data from ISORA suggests that most countries (around 85 percent) have a LTO, defined based on variables such as amount of annual sales, income, assets, taxes paid and/or type of economic activity. LTOs typically contribute a large share to overall tax revenues. In Indonesia, this share is estimated at around 30 percent, lower than in peers.

Broadening the taxpayer base is also important, especially in economies with relatively high labor and output informality. The number of active taxpayers (in relation to the labor force or total population) also matters for tax collection, especially in economies with relatively high labor and output informality such as Indonesia's.³ For example, the share of registered and active taxpayers of personal income taxes (PIT) to total population in Indonesia is around 10 percent. This is relatively lower than the shares in ASEAN and EMs of around 15 and 17 percent, respectively.



Sources: Calculations based on ISORA 2018 and World Development Indicators (WDI).

Conclusion

The elected administration in Indonesia has pledged to raise the total revenue by 10 ppts from 13 percent of GDP, including by establishing a new National Revenue Agency. A survey of the international experience suggests that independent revenue agencies need not be viewed as a panacea, and that sustained revenue administration reforms and modernization are persisting processes. Key factors to effective revenue administrations include compliance risk management, use of third-party data, digitalization, appropriate staffing, and broad taxpayer bases is critical.

Notes

1. ISORA is a joint survey by the IMF, IOTA, OECD, ADB and CIAT. The survey gathers data on collections, institutional structure, budget and human resources, segmentation, taxpayer registration, filing and payment, services and education, collection and enforcement, inspection, audit and investigations, and dispute resolutions. ISORA database is available online here; it covers 155 countries representing around 90 percent of world GDP.
2. Varying degrees of autonomy are possible; hence “semi-autonomy” reflects a range within the autonomy spectrum (Crandall et al 2021, Crandall 2010). Semi-autonomous bodies also include Revenue Authorities (RA). RAs refers to a governance model for revenue administration where traditional ministry of finance departments (tax and customs administrations) are established as a separate organization with a degree of autonomy from government (Kidd and Crandall 2006, Crandall 2010).
3. See Hapsari et al (2023) on informality in Indonesia.

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