



Special Series on COVID-19

The Special Series notes are produced by IMF experts to help members address the economic effects of COVID-19. The views expressed in these notes are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

December 16, 2020

Tax Policy for Inclusive Growth after the Pandemic

Ruud de Mooij, Ricardo Fenochietto, Shafik Hebous, Sébastien Leduc, and Carolina Osorio-Buitron¹

This note provides guidance on tax policy reforms after economies have recovered from the COVID-19 crisis and fiscal consolidation becomes imperative. The focus is on identifying tax measures that can boost revenue mobilization in a way that is both inclusive and growth friendly. The note concludes that countries have multiple options to enhance the effective progressivity of their tax systems, reduce key tax distortions to growth, exploit corrective taxes to support a green recovery, and adjust tax designs to cope with an increasingly digitalized economy after the pandemic.

I. INTRODUCTION

The pandemic has elevated social inclusion on policy agendas around the world. In many countries, the poor have been hit hard by the COVID-19 crisis—be it in the form of job losses, income reductions, or exposure to health risks—while some of the more affluent have fared better. In response, governments have forcefully intervened through fiscal policies that protect vulnerable groups and reverse the looming rise in poverty and inequality.²

To support an inclusive recovery, fiscal policy will continue to play an important role. Once vaccines and therapies become widely available, tax and spending measures can—where feasible—continue to support vulnerable households and contribute to a robust recovery. For instance, specific temporary tax relief could support the recovery, and where fiscal space is limited, a more progressive tax structure could still do so by shifting income from people with low to those with high propensity to consume. Beyond the initial recovery phase, however, governments will look to unwind their fiscal interventions and gradually tackle the record-high

¹ Please direct any questions and comments on this note to cdsupport-revenue@imf.org.

² IMF policy tracker [here](#).

public debt levels through fiscal consolidation measures.³ A critical issue is how this will be done and who will pay. This points to a key role of tax policy.

This note discusses how tax systems can help address the fiscal challenges post COVID-19. Although the pandemic has not changed the key principles underlying the main taxes on income, wealth, and consumption, the recovery from COVID-19 offers opportunities to resolve longstanding weaknesses in tax systems as well as revive taxes in support of a desirable transformation.⁴ For instance, countries will face an even bigger challenge in the post-COVID-19 world to provide prospect and support to vulnerable individuals and struggling but viable businesses while, at the same time, ask a larger contribution from those who are doing well. Moreover, the pandemic is accelerating the adoption of digital technologies that transform economies, which poses new tax challenges and opportunities.⁵ Taxes can also play an important role for a green recovery.⁶ And, in many countries, a looming revenue shortfall amplifies the pre-COVID-19 challenge to fund the significant expenditure needs as part of the sustainable development goals.⁷

Tax policy options are assessed based on whether they are “inclusive” and “growth friendly.”

Inclusiveness is reflected mainly in the progressivity of the tax system—a tax burden that rises with a taxpayer’s income or wealth. It also refers to other dimensions of equality, such as equal treatment by gender, equality of opportunity, intergenerational equity, as well as treating people in similar circumstances the same (horizontal equity). Robust *growth* after the pandemic calls for taxes that minimize adverse effects on investment, savings, employment, productivity, or consumption. Empirical studies have established a so-called growth-ranking of taxes, with income taxes found to be more harmful for long-term growth than consumption and property taxes.⁸ However, opposite results are found for the ranking on inequality, that is, income taxes tend to reduce inequality more than consumption taxes. This suggests that there must ultimately be a trade-off between growth and inclusion in choosing the tax composition. Yet this trade-off might be relaxed by improving the design of each of these taxes. For instance, measures to broaden the value-added tax (VAT) base are found to be less harmful for growth than raising VAT rates, and corporate taxes can be redesigned to mitigate their distortions to growth.⁹ These issues are addressed in more detail below.

The note aims to provide high-level operational guidance for tax policymakers, with underlying analytical work and more granular discussions put in references for interested readers.¹⁰ The ultimate advice to countries will need to be further tailored to needs and circumstances, depending on the fiscal stance, level of income, structure of the economy, informality, and capacity of the tax administration. Although the note focuses on tax

³ October 2020 *Fiscal Monitor* [here](#). High debt-to-GDP ratios can also be reduced through high growth, reflecting the importance of structural reforms.

⁴ Some countries with well-designed tax systems may cover the one-off cost of the crisis with a temporary recovery contribution, such as a surcharge on existing taxes.

⁵ Gupta S., A. Shah, M. Keen, and G. Verdier. 2017. *Digital Revolutions in Public Finance*, [here](#); April 2018 *Fiscal Monitor*, Digital Government, [here](#).

⁶ IMF COVID-19 Special Note “Greening the Recovery” [here](#).

⁷ Gaspar V., D. Amaglobeli, M. Escibano, D. Prady, and M. Soto. 2019. “Fiscal Policy and Development: Human, Social and Physical Investments for the SDGs,” [here](#).

⁸ Arnold and others (2011), Acosta-Ormaechea and others (2019).

⁹ IMF Policy Paper. 2015. “Fiscal Policy and Long-Term Growth,” [here](#).

¹⁰ Key references include: IMF Policy Papers: 2010. “From Stimulus to Consolidation” [here](#), 2010. “Revenue Mobilization in Developing Countries” [here](#), and 2014. “Fiscal Policy and Income Inequality” [here](#). October 2013 *Fiscal Monitor* [here](#); October 2017 *Fiscal Monitor* [here](#). 2018 *Regional Economic Outlook: Sub-Saharan Africa*, May, [here](#). Clements B., R. de Mooij, S. Gupta, and M. Keen. 2015. *Inequality and Fiscal Policy*, [here](#) and Abdelkader and De Mooij (2020).

policy, it refers frequently to tax administration aspects where there is a close link with policy;¹¹ it also mentions public expenditure policies where relevant but does not discuss them in detail.¹²

The note concludes that most countries have options to promote inclusive growth through tax reform.¹³

In advanced and some emerging market economies, options include more progressive personal income tax systems, more neutral taxation of capital and corporate income, a broader VAT base, and more/better use of carbon taxes, property taxes and inheritance taxes. Developing countries should continue to build their administrative capacity to better enforce existing taxes. Moreover, they can often improve and simplify their VAT and excises, protect their income taxes better against avoidance and evasion, reduce discretionary tax incentives, enhance fiscal regimes for extractive industries, and better exploit taxes on property and pollution. Tax increases that might not be progressive on their own—such as higher consumption taxes—might nevertheless be desirable from the perspective of inclusive growth if the revenues finance spending on for example, social programs, education, health, and infrastructure, which pursue better standards of living.

II. TAXATION OF INCOME

The income tax comprises both the personal income tax (PIT) and the corporate income tax (CIT). In advanced economies, the PIT raises more than 20 percent of total revenue, in developing countries less than 10 percent (Figure 1). For the CIT, things are the other way around: it raises more than 12 percent of total tax revenue in developing countries, but only 8 percent in advanced economies (Figure 2).

FIGURE 1. PIT Revenue to Total Revenue
Revenue
(Percent)

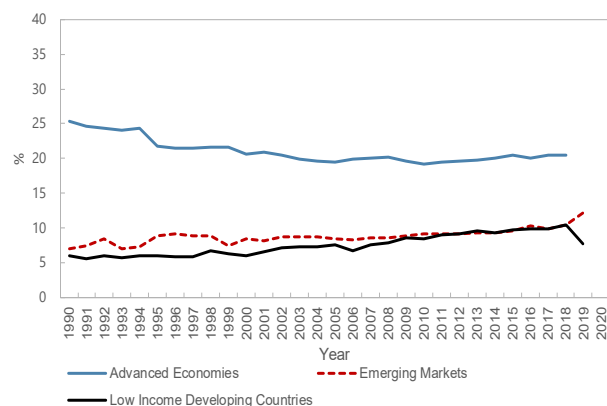
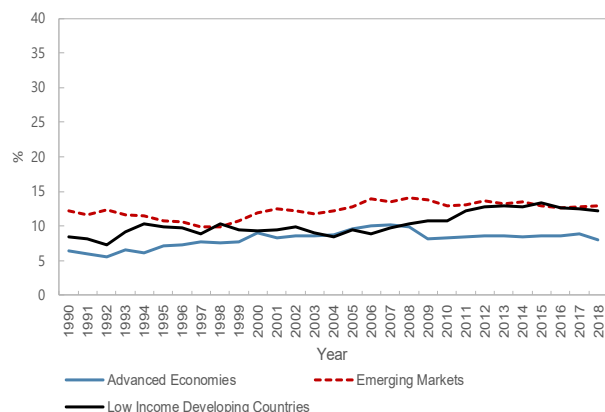


FIGURE 2. CIT Revenue to Total
(Percent)



Source: IMF Internal World Revenue Longitudinal Database.

¹¹ IMF Policy Paper. 2015. "Current Challenges in Revenue Mobilization: Improving Tax Compliance" [here](#) discusses the main challenges for tax administrations in developing countries. See also IMF COVID-19 Special Notes "Revenue Administration: Reinventing Operations to Safeguard Collection and Compliance" and "Business Continuity for Revenue Administrations" [here](#).

¹² IMF COVID-19 Special Notes "Expenditure Policies in Support of Firms and Households" and "Managing the Impact on Households: Assessing Universal Transfers" [here](#) and "Reaching Households in Emerging and Developing Economies: Citizen ID, Socioeconomic Data, and Digital Delivery" [here](#).

¹³ An important condition for achieving successful reform is strong political commitment and effective management by government. The Medium-Term Revenue Strategy (MTRS) offers a framework to manage the reform process, see Platform for Collaboration on Tax [here](#).

Personal Income Tax – Labor

The PIT can exploit information about individual incomes and other personal circumstances to explicitly shape the tax to be progressive. However, since high marginal tax rates distort incentives to work, learn, and earn and induce tax avoidance and evasion behaviors, the optimal degree of progressivity should strike a balance between equity and efficiency. This design of the income tax is the subject of an extensive literature that guides policy as follows.

Key guidance

- **Individualize the PIT:** Income tax systems can be based on either individual or family income. While family tax systems recognize the support that partners in couples provide to each other, they typically increase marginal tax rates on secondary earners who are often females. Thus, they implicitly discriminate against women. As women are on average relatively more responsive to taxes than men,¹⁴ this discourages aggregate labor supply and harms growth. Individual taxation is therefore more efficient and more gender neutral.
- **Set an appropriate exemption threshold** on income, either through a general tax deduction, a tax credit, or a zero-rate bracket, to enhance. This contributes to progressivity and eases administration for people with incomes below the threshold. A tax credit is more progressive than a tax deduction or a zero rate, since the value of the latter depends on the marginal tax rate that the taxpayer faces. In the OECD, the median threshold is approximately 25 percent of the average wage. In developing countries, they are generally higher as a percentage of the average wage, which helps ease administration. However, thresholds sometimes significantly exceed the average wage, which shrinks the tax coverage and turns the PIT into a tax on top-income earners only, thereby raising little revenue. Common advice is not to set the threshold higher than the average wage, although higher levels can be envisaged where it is below a reasonable subsistence level.
- **Use a progressive PIT rate schedule,** calibrated to fulfil its revenue need while striking a balance between equity and efficiency. A flat rate PIT—adopted by almost 30 countries, sometimes at very low rates of 10 to 15 percent—is typically much less progressive than a scheme based on a stepwise rising marginal PIT rate schedule, used in most countries.
- **Carefully choose the top PIT rate,** often a politically contentious issue which depends on society's aversion to inequality. A benchmark that is sometimes used is the revenue-maximizing rate, which accounts for behavioral responses from top earners. Studies estimate this rate (which in these calculations includes social contributions and implicit consumption taxes that reduce the real value of income) between 50 and 60 percent in advanced economies.¹⁵ Thus, some countries seem to have scope for higher top PIT rates to strengthen progressivity. For developing countries, the revenue maximizing rate might be lower due to weaker enforcement capacity.¹⁶ Another important parameter is the income level at which the top PIT rate will apply. The median in the OECD is three times the average wage, but the variation is large.
- **Employ worker credits at the bottom, if the administration is sufficiently strong.** Refundable in-work tax credits for low-wage earners can be desirable to support equity objectives, while encouraging labor-market participation. To reduce their fiscal costs, they should be phased out with income—even if this creates a high marginal tax rate for low-wage earners. These schemes require strong administrative capacity, which makes

¹⁴ Compared with men, women take on a larger share of home duties relative to paid labor, which makes them more flexible in adjusting formal working hours, see for example, Alesina, Ichino, and Karabarbounis (2011). Evers, de Mooij and Van Vuuren (2008) provide a meta-analysis of estimated labor-supply elasticities for men and women.

¹⁵ October 2013 *Fiscal Monitor* [here](#).

¹⁶ After major economic shocks, some countries (for example, Australia [2011], Germany [1991], and Japan [2012]) have used temporary increases in (top) PIT (and CIT) rates to repay for a temporary spending increase.

them less suitable for developing countries. Relief at the bottom might also be granted for social contributions (while ensuring benefit eligibility), as some countries did during COVID-19.

- **Restrain ineffective/inefficient PIT deductions and credits**, often used by countries—including developing ones—for expenses related to children, education, housing, health insurance, commuting, and charitable donations. Some of these tax expenditures accrue disproportionately to the rich, especially when designed as deductions the value of which depends on the marginal tax rate of the taxpayer. In developing countries with high PIT thresholds, these deductions typically do not benefit poor households at all. Streamlining tax expenditures can simplify the PIT, raise more revenue (or the same revenue at lower tax rates), and enhance progressivity. Some tax expenditures might have positive effects on inclusive growth, however, such as deductions/credits for childcare and education.
- **Adopt a simplified small business regime, especially where tax compliance is problematic.** Many (developing) countries successfully apply a simplified, presumptive regime for businesses below some turnover threshold to ease compliance and encourage formalization of small businesses. The regime is usually based on turnover or cash flow and should be limited to small businesses.¹⁷ Rates are usually modest but should not be too low relative the burden under the PIT as this discourages entry into the normal income tax regime. During COVID-19, cash-flow problems for small businesses have justified deferral or temporary suspension of these tax payments.

Personal Income Tax – Capital

Since income from capital is generally skewed toward the rich, the progressivity of the PIT can be strengthened by taxing interest, dividends, and capital gains. There are two common designs. One is to tax the sum of labor and capital income under a progressive rate structure, consistent with the ability-to-pay principle. This “global income tax” is often seen as the most equitable system and would also be neutral in the treatment of labor versus capital income (which can sometimes be hard to separate, for example, for the self-employed). However, the global income tax can be administratively complicated. Moreover, high marginal tax rates on mobile capital run the risk of relatively large distortions and ample avoidance and evasion. The alternative is separate taxation of labor and capital income under a “dual income tax.” Typically, a progressive rate scheme then applies to labor income, while a flat rate applies to capital incomes, usually at a lower rate to mitigate distortions. In recent decades, income tax systems have moved in the direction of the dual system, although rarely in its pure form. The following guidance on capital income taxation is universal.

Key guidance

- **Tax different forms of capital income in a neutral way.** Differential treatment of interest, dividends, and capital gains causes distortions in asset portfolios and erodes the capital income tax base. In most countries, interest and capital gains are taxed less than dividends—and in some, capital gains are entirely exempt from PIT (most notably in low-income countries due to difficulties in enforcement). Moreover, certain types of returns (for example, on government bonds) or certain investors (for example, institutional investors) receive preferential treatment. Neutral taxation of all capital income can minimize avoidance and strengthen revenue mobilization in a progressive manner.¹⁸
- **Set a reasonable tax rate on capital income.** It might be argued that the tax rate on capital income should be lower than the top rate on labor income, as international capital mobility renders these taxes relatively distortive. However, equity considerations might support a reasonably high tax on capital income. Moreover,

¹⁷ A common problem is that eligibility thresholds are too high so that medium-sized businesses enjoy preferred tax treatment. Legal entities and individuals providing professional services—such as lawyers, accountants, physicians—should be excluded from presumptive regimes and comply with the normal PIT.

¹⁸ Capital gains are generally taxed upon realization, rather than accrual, which can justify a different tax rate compared to dividends and interest.

capital income taxes should not differ too much from taxes on labor income to avoid arbitrage—especially relevant for self-employed entrepreneurs organized as closely-held corporations, who can either pay themselves salaries (subject to PIT) or dividends (subject to CIT and dividend tax).

- **Use withholding taxes (WHTs) where feasible.**¹⁹ They are effective enforcement mechanisms by collecting tax from a limited number of sources, such as financial institutions and other large corporations.
- **Exploit third-party information.** The key challenge for tax administrations to mitigate the risk of capital income tax evasion is to collect and use third-party information, such as individual banking information. Recent global developments facilitate automatic exchange of information for tax purposes between countries, which can help to effectively counter offshore tax evasion. Getting access to and using these data remains challenging for developing countries.²⁰

Corporate Income Tax

The CIT is an integral part of the income tax and an important source of revenue in most countries. The extent to which the CIT contributes to progressivity is not straightforward as its incidence may fall not only on firms or their shareholders, but also on workers in the form of a lower wage. Yet, to the extent the CIT falls on rents (earnings above the minimum return required by the investor), the incidence will be on the firm's owners and the CIT can help achieve redistribution. Moreover, taxing rents is non-distortive. If the CIT were designed as a rent tax (for example, by excluding the minimum required return from the base, or by designing it as a cash-flow tax where investment can be immediately expensed), it would become more growth friendly. Such a tax design would have special appeal in light of COVID-19, as it would not affect struggling businesses earning minimal profit or incurring losses (such as in travel and hospitality sectors) but does raise revenue from companies that are thriving during the pandemic (such as some pharmaceutical and highly digitalized businesses). Moreover, a rent tax would also eliminate the debt bias inherent in current CIT systems and thus make firms less vulnerable to default during large shocks such as the COVID-19 crisis.²¹

During COVID-19, many countries have provided temporary relief to companies' CIT burdens, for instance by deferring tax obligations, adjusting installment payments, or allowing loss carry backs. This has improved business cash flow and supported the survival of illiquid but otherwise solvent businesses. During the recovery phase, temporary stimulus measures, such as accelerated depreciation or investment credits could be considered to boost investment. With time, however, these temporary measures will need to be phased out—and the CIT restored or strengthened as a tax on profitable businesses.

The CIT is under pressure from international spillovers. First, aggressive tax competition has led to sharp declines in statutory CIT rates worldwide (Figure 3). Second, multinational companies often manage to achieve a very low tax bill by shifting profits from high to low-tax jurisdictions, for instance by using transfer pricing techniques, international debt shifting, and treaty shopping.²² Such tax avoidance is particularly important for developing countries, given outdated legislation and limited capacity to address the issue. International

¹⁹ The collection of PIT on labor income also benefits from withholding by employers through pay-as-you-earn schemes.

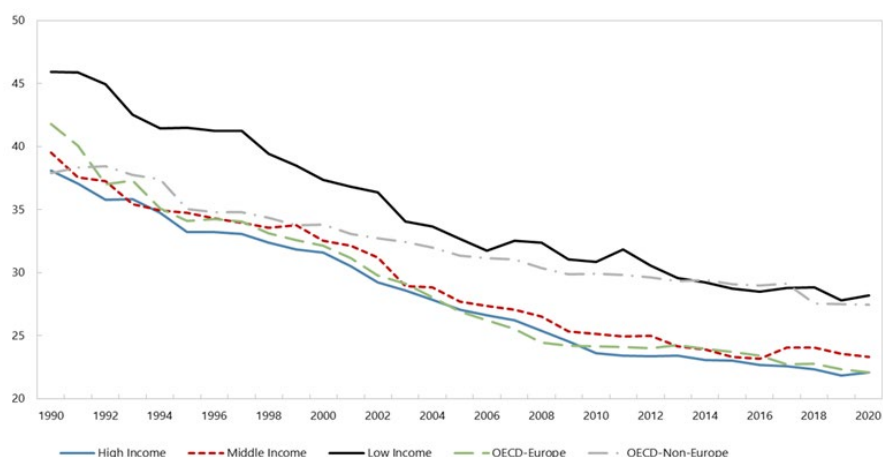
²⁰ Chang and others (2020) estimate how third-party information can strengthen revenue collection in developing countries. Beer, Coelho, and Leduc (2019) assess the impact of automatic exchange of information on cross-border tax evasion.

²¹ IMF Policy Paper. 2016. "Tax Policy, Leverage and Macroeconomic Stability" [here](#).

²² IMF Policy Paper. 2014. "Spillovers in International Corporate Taxation" [here](#).

coordination of CIT systems has made some progress in recent years to mitigate these risks.²³ Countries themselves can consider the following policy options to strengthen their CIT.

FIGURE 3. Trend in Statutory CIT Rates



Source: IMF Fiscal Affairs Department Tax Policy Database.

Key guidance

- **Set a reasonable CIT rate.** Tax competition has induced a decline in the global average CIT rate from above 40 percent in 1990 to between 20 and 25 percent today. Low-income countries have sustained somewhat higher rates at about 30 percent; and large countries generally maintained relatively higher CIT rates compared to small countries.
- **Use cost-based rather than profit-based tax incentives.**²⁴ Especially developing countries often aim to attract foreign direct investment (FDI) by providing outright CIT exemptions, for example, in special economic zones or through tax holidays. However, these are generally found to be ineffective, inefficient, and prone to abuse. Evidence suggests that they rank low in the list of relevant location factors for multinationals, and they often are redundant—that is, the investment would have been undertaken without them. Their fiscal cost can be high—sometimes multiple percentage points of GDP. Tax incentives that directly reduce the cost of investment, such as investment tax credits, accelerated depreciation, or expensing yield more investment per government dollar spent. The governance and management of tax incentives can often be improved by relying on objective rules-based criteria embedded in the tax law, as opposed to discretionary granting on a case-by-case basis. Sunset clauses can facilitate timely evaluation.
- **Use incentives for research and development (R&D) if the tax administration can enforce them.**²⁵ Many advanced economies encourage R&D through special tax credits or super deductions in the CIT. These policies can be efficient due to the positive externalities associated with R&D. Empirical evidence suggests that these policies have worked well in many advanced economies and that they hold the prospect of generating significant positive long-term growth effects. Yet, they require strong enforcement capacity to limit abuse. Recently, some countries, especially in Europe, have adopted so-called patent box regimes that

²³ Discussions are ongoing in the OECD/G20 *Inclusive Framework* to introduce (1) minimum taxes to curb tax competition and tax avoidance and (2) new taxing rights to address concerns over digitalization. OECD. 2020. Tax Challenges Arising from Digitalization—Report on [Pillar One Blueprint](#)—[Pillar Two Blueprint](#).

²⁴ IMF, OECD, World Bank, and UN Toolkit. 2015. “Options for Low Income Countries’ Effective and Efficient Use of Tax Incentives for Investment” [here](#).

²⁵ April 2016 *Fiscal Monitor* [here](#).

reduce the tax on the profits from innovations. They are generally less cost-effective than incentives that reduce the costs of R&D.

- **Avoid special tax incentives for small and medium-sized enterprises (SMEs)**, such as reduced CIT rates or size-related tax deductions.²⁶ They run the risk of discouraging firm growth and may end up benefiting wealthy entrepreneurs who own multiple businesses (thus undermining progressivity); they also can consume considerable administrative effort.
- **Design a special fiscal regime for extractive industries**²⁷ to capture a reasonable portion of the resource rents associated with petroleum and mining extraction. These special regimes generally come in addition to the normal CIT and comprise resource rent taxes in combination with royalties or production-sharing. In some resource-rich economies, the revenue from these taxes can be sizeable. However, the commodity price slump that coincides with COVID-19 has significantly affected these revenues and called for adequate policy responses.²⁸
- **Adopt tailored anti-tax avoidance rules to protect the CIT against profit shifting by multinationals.**²⁹ The G20/OECD project on base erosion and profit shifting (BEPS) agreed upon common international rules and guidance for countries to protect their tax base, while avoiding double taxation. However, distinct problems and capacity limitations in developing countries require more tailored or simplified solutions that strike a balance between being administrable without infringing upon legitimate business undertakings. For instance, an alternative minimum tax can be imposed, based on simplified indicators, such as turnover or assets.³⁰ Similarly, simple caps can be imposed on deductible payments to mitigate tax avoidance. Developing countries should also exercise caution in signing double tax treaties and pay close attention to their terms and conditions. For instance, they should avoid tight restrictions on the use of withholding taxes on foreign payments (for example, on royalties, interest or intra-company services), which can be effective instruments to mitigate tax avoidance, and they should avoid restrictions on the ability to tax indirect sales of immovable assets, especially important in extractive industries.³¹

III. TAXATION OF WEALTH

Although most countries tax the return on capital through income taxes, they often complement, and sometimes substitute, them with taxes on the stock of wealth or wealth transfers. Figure 4 shows that the revenues raised by such taxes—including taxes on property, net wealth, and asset transfers—varies between 1 and 4 percent GDP in advanced economies; they are generally (much) lower in developing countries.³² Such taxes have recently gained increased attention because of high and rising wealth inequality (possibly further amplified by COVID-19) and have been promoted as a way to recover revenue after COVID-19.

²⁶ April 2016 *Fiscal Monitor* and April 2017 *Fiscal Monitor* [here](#).

²⁷ For analysis and discussion of these regimes, see Daniel and others (2010 and 2016) and IMF Policy Paper. 2012. “Fiscal Regimes for Extractive Industries: Design and Implementation” [here](#). The IMF has developed the Fiscal Analysis for Resource Industries (FARI) model to evaluate these regimes, [here](#).

²⁸ IMF COVID-19 Special Note “Natural Resource Fiscal Regimes: Tax Policy Response” [here](#)

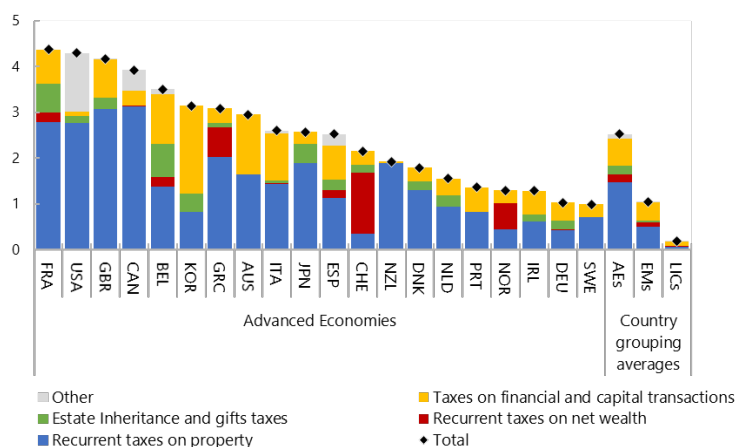
²⁹ IMF Policy Papers: 2014. “Spillovers in International Corporate Taxation” [here](#) and 2019. “Corporate Taxation in the Global Economy” [here](#).

³⁰ Aslam and Coelho (forthcoming).

³¹ Platform for Collaboration on Tax. 2020: Toolkit on the Taxation of Offshore Indirect Transfers [here](#).

³² The note does not discuss financial transaction taxes, which create multiple distortions and would unlikely contribute to inclusive growth (Matheson 2011).

FIGURE 4. Taxes on Wealth, 2017
(Percent of GDP)



Source: OECD Global Revenue Statistics Database.

Key guidance

- **Exploit recurrent real property taxes more fully.**³³ Such taxes are imposed on gross property values and are found to be among the least distortive for economic growth, most likely as their base is immobile and current rates are low. Property taxes are often a revenue source of local governments and can support their accountability. To the extent that property values reflect the value of local public services, property taxes resemble a benefit tax. They raise on average about 1 percent of GDP in advanced economies, although this goes up to 3 percent of GDP in Canada and the United Kingdom. In developing countries, they generally raise less than ½ percent of GDP. In many countries, there is scope to exploit this tax more fully by raising tax rates, updating property values to current market prices and, especially in developing countries, improving cadasters and scaling up administrative capacity. Where market-based valuation is hard, simplified approaches based on property areas can produce reasonable outcomes at lower administrative costs.
- **Consider net wealth taxes (NWTs)—perhaps above some threshold—if other taxes on asset returns are not sufficiently effective.** NWTs are imposed on the sum of financial and nonfinancial wealth minus liabilities. They target the same base as capital income taxes to the extent that assets generate a flow of income. The base of an NWT might be broader if non-income-generating assets are included. However, difficulties often arise with the valuation of such assets, which is one reason why these have often been exempt from NWTs (for example, primary residences, pension assets, farm and business assets, artwork, jewelry, shares in unlisted businesses). Evidence for Scandinavia and Switzerland shows that NWTs have encountered ample avoidance and evasion, most notably by the wealthiest individuals hiding their wealth offshore, which inhibits the progressivity of the tax. During the last few decades, several countries have repealed their NWTs due to their low yield relative to administrative costs. In Switzerland, however, the cantonal NWT, which has a relatively broad base, operates as a substitute for the capital income tax and raises more than 1 percent of GDP. Automatic exchange of information between countries and the adoption

³³ Norregaard (2013). Property transfer taxes are sometimes used as a substitute for recurrent property taxes, as they can be easier to collect. However, property transfer taxes are generally more distortive than recurrent property taxes, as they reduce mutually beneficial transactions.

of a dedicated unit in the revenue administration to deal with high-wealth individuals could mitigate non-compliance. However, administrative challenges make NWTs less viable for developing countries.

- **Impose estate or inheritance/gift taxes.** They can be effective redistributive tools to limit inter-generational wealth inequality and enhance equality of opportunity—an important dimension of inclusiveness. Although most advanced economies impose them, these taxes have not proved easy to implement due to ample tax exemptions, sometimes very high thresholds and widespread avoidance and evasion. The average revenue in countries that have such a tax is 0.1 percent of GDP in 2017. However, revenues are higher in Belgium and France (up to 0.7 percent of GDP), suggesting that often improvement is feasible.

IV. TAXATION OF CONSUMPTION

Consumption taxes are generally less progressive than taxes on income or wealth and might sometimes even be regressive. It is more difficult to make consumption taxes progressive because governments usually cannot observe individual purchases. Attempts to make consumption taxes more progressive are therefore blunter and less efficient than designing progressivity in income and wealth taxes. Yet consumption taxes are a major revenue source for most governments, in part due to their relative ease of enforcement and collection. If the revenue is used for progressive spending, the net impact on the poor can still be positive. This section discusses two consumption taxes: VAT and excises.

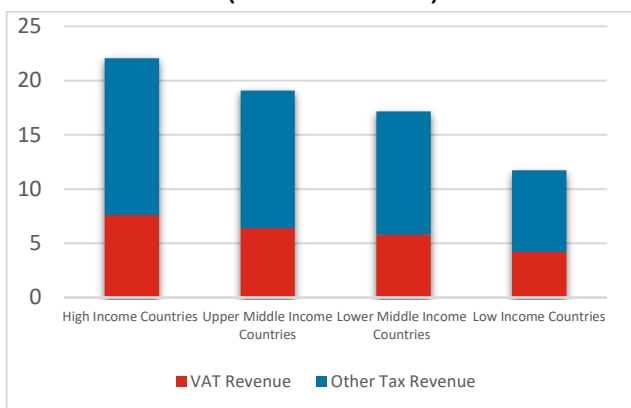
Value-Added Tax³⁴

Adopted by more than 160 countries worldwide, the VAT typically accounts for about one-third of total tax revenue, with average revenue ranging from 4.2 percent of GDP in low-income countries to 7.6 percent of GDP in high-income countries (Figure 5). Yet, VAT revenues may be at only about half of their potential, as reflected by its “C-efficiency”—the ratio of actual VAT revenues and the product of domestic consumption and the standard VAT rate. Average C-efficiency sits at about 51 percent, but can be much lower (for example, 35 percent in sub-Saharan Africa) (Figure 6). This points to significant potential for improvement through better VAT design and enforcement. For instance, if sub-Saharan African countries would raise C-efficiency to the world average, revenue would expand by about 2 percent of GDP.

³⁴ Ebril and others (2001), IMF Policy Paper. 2019. “Macroeconomic Developments And Prospects In Low-Income Developing Countries [here](#) and the VAT module of the Tax Policy Assessment Framework [here](#). In some countries, the VAT is referred to as general sales tax (GST).

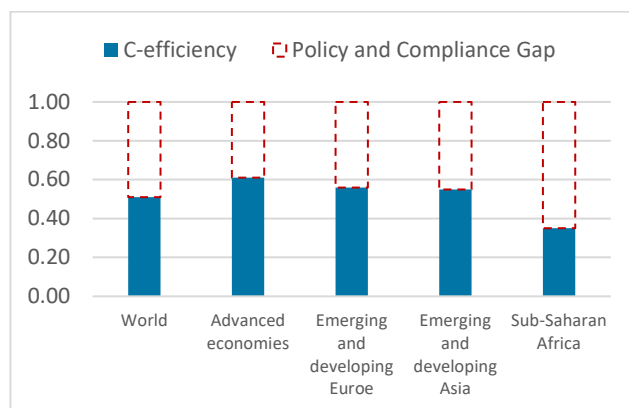
FIGURE 5. VAT Revenues

(Percent of GDP)



Source: IMF Internal World Revenue Longitudinal Database.

FIGURE 6. VAT C-Efficiency Ratios



Source: Tax Policy Assessment Framework (TPAF).

The VAT is sometimes believed to be regressive insofar as the poor pay more tax as a share of their annual income than the rich. These claims should be qualified, however, as they mainly reflect higher annual savings by those with high incomes. Indeed, when the tax burden is measured against current expenditures—which many would argue is likely a better indicator of economic well-being—consumption taxes are often found to be proportional, or even slightly progressive. To be effective in generating revenue while supporting inclusive growth, VAT design should be based on the following.

Key guidance

- **Adopt a single VAT rate.** The average standard VAT rate across the world is about 15 percent, with generally somewhat lower rates observed in Asia and somewhat higher rates in Europe. Several countries apply reduced VAT rates (including zero)³⁵ on certain products or services, often to make the VAT more progressive. However, since high-income households typically spend more on such purchases (for example, on food), this is a blunt and inefficient way to enhance tax progressivity, for example, compared to income taxes or compared to offsets through social spending measures to protect the most vulnerable. Reduced VAT rates also come at a significant cost in terms of revenue, create economic distortions, cause administrative complexities, and increase the compliance burden for firms.³⁶
- **Minimize the use of VAT exemptions.** VAT is imposed on every transaction in the production process. When goods are purchased by a VAT registered business, the tax paid on inputs is credited or refunded. This design ensures that VAT is ultimately only levied on final consumption and that production distortions are prevented. It also has the attraction of encouraging voluntary tax compliance, since each business has an incentive to register to claim credits on their inputs. Moreover, those who operate in the informal sector are still charged on their inputs, without them being able to claim credits. VAT exemptions undermine the self-

³⁵ Under a zero VAT rate, suppliers can claim credits for input VAT. This is different from a VAT exemption, in which case no credits can be claimed. Exports should be zero-rated, and imports taxed under a destination-based VAT. As VAT credits can exceed VAT liabilities for zero-rated suppliers (including exporters), this gives rise to VAT refunds. Managing such refunds has been challenging in many developing countries; for a discussion, see Pessoa and others (2020). During COVID-19, some countries have expedited VAT refunds to relax credit constraints.

³⁶ In countries for which more efficient redistributive instruments are not feasible, reduced VAT rates or exemptions could still be used on limited items. However, during the past year, some countries have advanced their spending instruments to serve redistributive goals better.

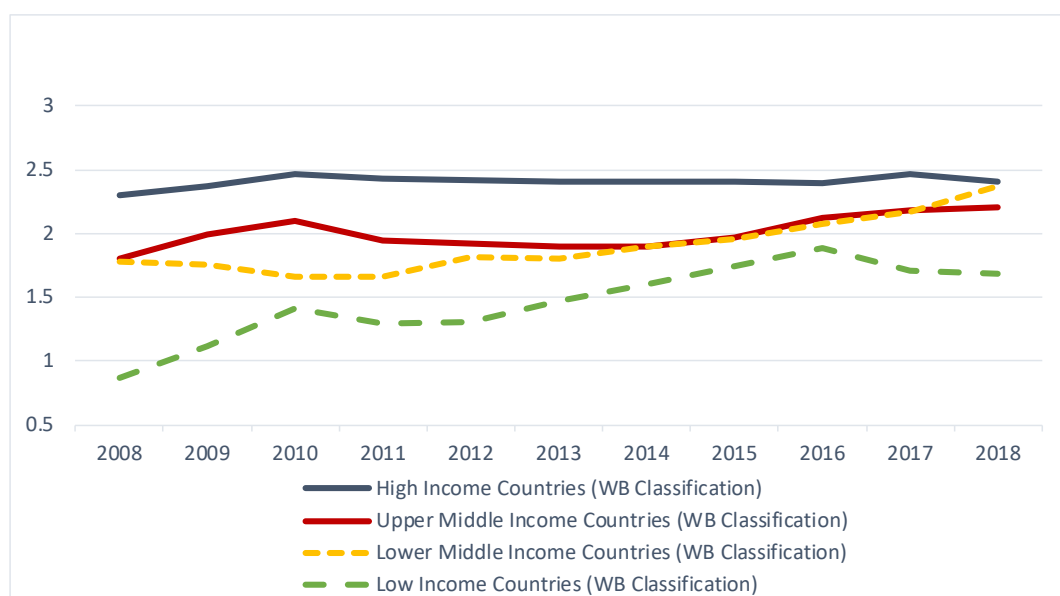
enforcing nature of the tax by taxing inputs and cause production distortions. It is therefore recommended to minimize the number of VAT exemptions—although a few well-defined exemptions are common, for instance on margin-based financial services, health care, and sometimes basic foodstuffs.

- **Set an appropriate VAT registration threshold.** Exempting small traders from VAT registration has the appeal of relieving them from the compliance burden; it also allows the tax administration to focus its enforcement efforts on large traders. The threshold can strengthen the progressivity of the VAT in developing countries, where the poorest often buy their goods from small traders.³⁷
- **Modernize VAT on e-commerce.** Countries should require online vendors to register for VAT, require digital platforms to collect VAT on their sales, and reduce the threshold for VAT on small imported consignments. COVID-19 has made these steps more important.

Excises

Excises are widely used to tax the consumption of selected goods and services, such as alcohol, tobacco, petroleum, and, increasingly, unhealthy foods (for example, sugary drinks) and plastic waste. They are generally motivated by a desire to internalize externalities, or to deal with health concerns associated with addictive consumption. In developing countries, excises also have the appeal of being easy to collect from a limited number of sources. Their revenue yield—typically between 1½ and 2½ percent of GDP—has been trending upwards, particularly in low-income countries (Figure 7). Yet there is often room to increase excise revenues further through a combination of better design, improved enforcement and higher tax rates. Also new excises can sometimes be considered.

**FIGURE 7. Excise Tax Revenues
(Percent of GDP)**



Source: IMF Internal World Revenue Longitudinal Database.

Key guidance

³⁷ Bachas, Gadenne, and Jensen (2020).

- **Exploit excises on alcohol, tobacco, and unhealthy foods.**³⁸ These excises can best be specific (that is, on a per-product basis) rather than ad valorem (on their value) to achieve their behavioral and health objectives and ease administration. To prevent their value from being eroded by inflation, specific rates should be indexed annually. Behavioral responses—including through smuggling and bootlegging—constrain the revenue-raising ability of these taxes. In advanced economies, excises tend to bear relatively more on low-income individuals—although these people also benefit from improvements in their health; the distributional impact is less clear in developing countries.³⁹
- **Make more and better use of environmental taxes,** including fuel excises. These are efficient instruments to address climate and other externalities.⁴⁰ They should be imposed per unit of emissions, at a level directly related to the external costs, such as the social cost of carbon in the case of climate externalities. Efficient carbon taxes have the potential to raise significant additional revenue, while supporting a green recovery post COVID-19. For instance, a carbon tax of \$75 per ton—necessary to meet the Paris Agreement climate objectives—has been estimated to generate between 1 and 2 percent of GDP in the medium term for several countries. Although carbon taxes tend to be moderately regressive in advanced economies (but not in low-income countries), these effects can be offset by using part of their revenue for pro-poor expenditures.
- **Cautiously approach the use of emerging service taxes.**⁴¹ Several countries have introduced—or are otherwise considering—new forms of “excise taxes,” primarily motivated on revenue grounds. Excises on telecommunication services have, for example, become prevalent in Africa to tax the rents associated with scarce operating licenses. Being easy to administer, revenue exceeds ½ percent of GDP in countries such as Liberia and Malawi. However, these revenues should be weighed against the distortions they create, and their incidence might be shifted onto consumers—thus mitigating effects on rents. Another—more nascent—example is digital service taxes, levied on revenues from social media platforms, internet search engines, and online marketplaces—which has gained interest during COVID-19 due to rising profits of these firms. Estimates suggest low yields from these taxes, although their base might be growing with ongoing digitalization. Again, these taxes may create their own distortions and their incidence can be shifted onto users.
- **Avoid higher trade taxes.**⁴² They provide for a relatively easy tax collection mechanism at the border and therefore remain an important source of revenue for many developing countries—often more than 2 percent of GDP. However, tariffs are inconsistent with inclusive growth. For instance, empirical studies find that they exert adverse effects on growth and increase inequality.

³⁸ On tobacco excises: Petit, P., and J. Nagy. 2016. “How to Design and Enforce Tobacco Excises?” [here](#). On unhealthy foods: Petit and others (forthcoming).

³⁹ Excises on luxury goods—such as yachts, jewelry, or perfumes—usually contribute little to progressivity, raise little revenue, and add administrative costs—the exception being excises on motor vehicles, which can raise sizable amounts in a progressive way.

⁴⁰ October 2019 *Fiscal Monitor* [here](#); Coady and others (2019) discuss fuel pricing.

⁴¹ See Matheson and Petit (2017) on telecom excises and Aslam and Shah (2020) on digital service taxes.

⁴² See IMF Reference Note on Trade Policy and WTO Consistency [here](#) and IMF Policy Paper. 2017. “Making Trade an Engine of Growth for All: The Case for Trade and for Policies to Facilitate Adjustment” [here](#). Furceri and others (2018) report evidence of the adverse effects of tariffs on both growth and inclusion. Daly, M. 2016. “Is the WTO a World Tax Organization? A Primer for WTO Rules for Policy Makers,” [here](#) discusses the policy considerations of trade taxes. Priorities for customs administrations during COVID-19 are discussed in IMF COVID-19 Special Note “Priority Measures for Customs Administrations” [here](#).

REFERENCES

- Abdelkader K., and R. de Mooij, Forthcoming. "Tax Policy and Inclusive Growth." IMF Working Paper, International Monetary Fund, Washington, DC.
- Acosta-Ormaechea, S., S. Sola, and J. Yoo. 2019. "Tax Composition and Growth: A Broad Cross-Country Perspective." *German Economic Review* 20 (4): 70–106.
- Alesina, Alberto, Andrea Ichino, and Loukas Karabarbounis. 2011. "Gender-Based Taxation and the Division of Family Chores." *American Economic Journal: Economic Policy* 3 (2): 1–40.
- Arnold, J.M., B. Brys, C. Heady, A. Johansson, C. Schweltnus, and L. Vartia. 2011. "Tax Policy for Economic Recovery and Growth." *Economic Journal* 121 (550): 59–80.
- Aslam A., and M. Coelho. Forthcoming. "Alternative Minimum Taxes." IMF Working Paper, International Monetary Fund, Washington, DC.
- Aslam A., and A. Shah. 2020. "[Tec\(h\)tonic Shifts: Taxing the Digital Economy](#)." IMF Working Paper 20/76, International Monetary Fund, Washington, DC.
- Bachas, P., L. Gadenne, and A. Jensen. 2020. "Informality, Consumption Taxes and Redistribution." NBER Working Paper No 27429, National Bureau of Economic Research, Cambridge, MA.
- Beer, S., M. Coelho, and S. Leduc. 2019. "Hidden Treasure: The Impact of Automatic Exchange of Information on Cross-Border Tax Evasion." IMF Working Paper 19/286, International Monetary Fund, Washington, DC.
- Chang, E.S., E. Gavin, N. Gueorguiev and J. Honda. 2020. "Raising Tax Revenue: How to Get More from Tax Administrations?" IMF Working Paper 20/142, International Monetary Fund, Washington, DC.
- Coady, D., I. Parry, N.P. Le, and B. Shang. 2019. "[Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates](#)." IMF Working Paper 19/89, International Monetary Fund, Washington, DC.
- Daniel, P., M. Keen, and C. McPherson. 2010. [The Taxation of Petroleum and Minerals: Principles, Problems and Practice](#). Abingdon, UK: Routledge.
- Daniel, P., M. Keen, A. Swistak, and V. Thuronyi. 2016. [International Taxation and Extractive Industries](#). Abingdon, UK: Routledge.
- Ebril, L., M. Keen, J.-P. Bodin, and V. Summer (eds). 2001. [The Modern VAT](#). Washington, DC: International Monetary Fund.
- Evers, M., R. de Mooij, and D. Van Vuuren. 2008. "The Wage Elasticity of Labor Supply: A Synthesis of Empirical Estimates." *De Economist* 156: 25–43.
- Furceri, D., S.A. Hannan, J.D. Ostry, and A.K. Rose. 2018. "Macroeconomic Consequences of Tariffs." NBER Working Paper 25402, National Bureau of Economic Research, Cambridge, MA.
- Mansour, M., P. Petit, and P. Wingender. Forthcoming. "Excises and the Obesity Pandemic." How-to Note, International Monetary Fund, Washington, DC.
- Matheson, T. 2011. "[Taxing Financial Transactions: Issues and Evidence](#)." IMF Working Paper 11/54, International Monetary Fund, Washington, DC.
- Matheson T., and P. Petit. 2017. "[Taxing Telecommunications in Developing Countries](#)." IMF Working Paper 17/247, International Monetary Fund, Washington, DC.
- Norregaard, J. 2013. "[Taxing Immovable Property: Revenue Potential and Implementation Challenges](#)." IMF Working Paper 13/129, International Monetary Fund, Washington, DC.
- Pessoa, M., A.K. Okello, A. Swistak, M. Muyangwa, V. Alonso-Albarran, and V. Koukpaizan. Forthcoming. "Managing VAT Refunds." How-to Note, International Monetary Fund, Washington, DC.