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COVID-19 and taxes

Policies for the post-pandemic recovery



In brief

- The COVID-19 pandemic has placed unprecedented strain on public finances across developing countries. Large fiscal responses and weak economic activity have widened deficits and increased public debt, which for many will be unsustainable over the medium-term.
- It is important for policymakers to consider policies for mobilising additional revenue. To this end, this policy brief discusses reform options across four types of taxes: wealth, property, consumption, and corporate income.
- Wealth taxes are underutilised as a policy tool. There is an opportunity to leverage them in response to COVID-19 as they can help reduce inequality and pave the way for equitable recovery. Linked to this option is the expansion of taxes on land and property, targeting the most visible form of wealth in most countries.
- The brief also outlines policy recommendations on more conventional tools: consumption and corporate taxes, which can be used more effectively to raise revenue by, for example, rationalising tax expenditures and using technology.

This brief is published as part of the IGC's ongoing response to the economic challenges of COVID-19.

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COVID-19 and the impact on tax revenue

Public finances have been impacted significantly by the COVID-19 pandemic. The disbursement of large economic and health support packages, coupled with a sharp contraction in economic activity, has led to growing fiscal deficits.¹ The magnitude of these deficits remains unknown because of the uncertainty regarding when the public health crisis will subside – and by extension, how frequent and severe domestic containment measures will be. However, once the crisis recedes, economic recovery is not expected to be quick and will create long-lasting fiscal pressures over the medium term. After the 2008 Global Crisis, it took an average of eight years for revenues to recover to their pre-crisis level.² During the Ebola crisis in Guinea, Sierra Leone, and Liberia, government revenues fell by an average of three percentage points between 2013 and 2016.³ For most governments, the post-pandemic phase will necessitate a need to mobilise resources for fiscal sustainability, whilst supporting economic growth and addressing enduring challenges around inequality and productivity.

The following section will look at how the pandemic has affected revenue collections for national and sub-national governments, and the implications this may have for future domestic revenue generation efforts, especially in developing countries.

National effects

For most developing countries, three broad types of taxes make up most of the government revenue: income taxes (both personal and corporate), taxes on goods and services, and trade taxes. For the countries listed in Figure 1, these sources account for an average of 80% of government revenue. At the same time, these countries tend to collect less revenue as a share of GDP, when compared to high-income economies. With fewer resources to provide public services, these countries are more vulnerable to falls in revenue and will find it difficult to finance COVID-19 response and recovery efforts.

The fallout from the pandemic is expected to hit the source of these three broad taxes particularly hard. Their deterioration will drive a substantial portion of reductions in government revenue.⁴ Containment measures have drastically lowered the amount of tax revenue generated in certain sectors such as hospitality, retail, travel, and tourism. It is still unclear how frequent or severe rounds of lockdown will be in the future, both domestic and international, but these will play a large role in determining how prolonged their impact may be. This will be further amplified by how reliant the economy and government revenue are on these affected sectors.

1. IMF (2020), Fiscal Monitor: Policies for the recovery

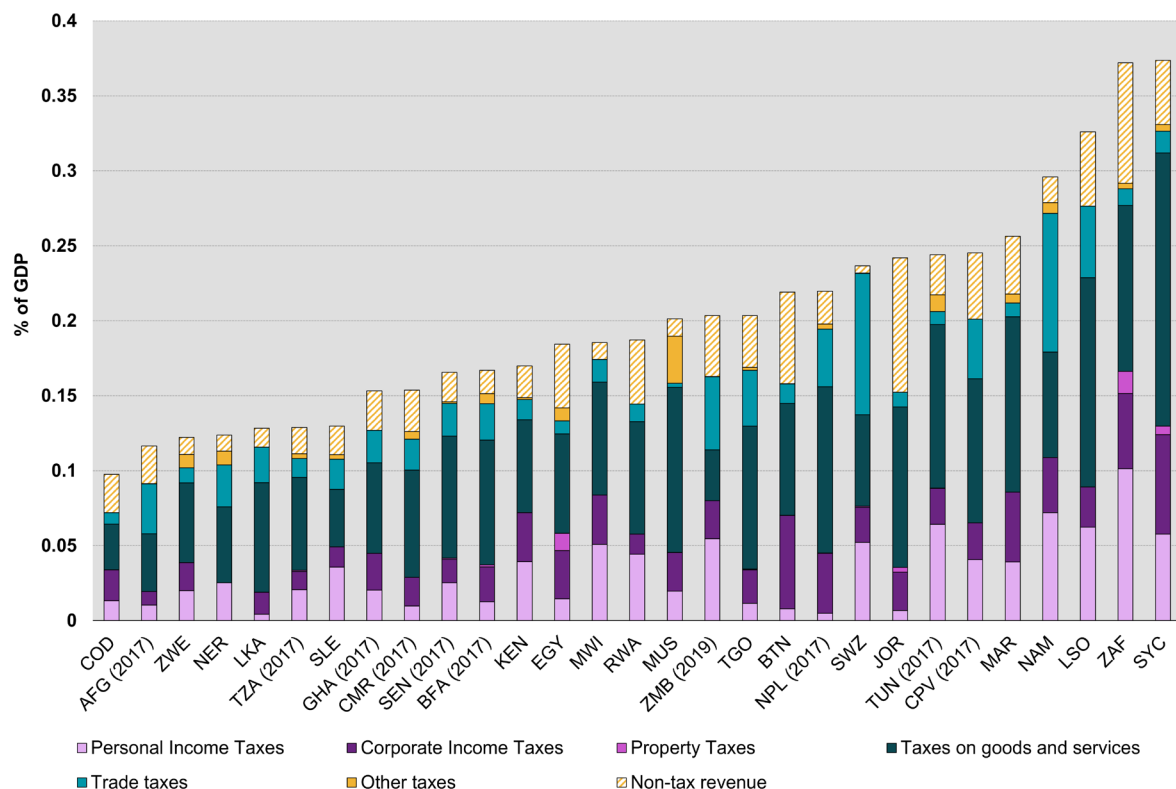
2. IMF (2020), Facing the crisis: the role of tax in dealing with COVID-19

3. Cangul, M., Sdravovich, C., & Sian, I. (2017). Beating back Ebola: nimble action on the economic front was key to overcoming the health crisis. *Finance & Development*, 54(2), 54-57.

4. IMF (2020). World Economic Outlook Update, June 2020

“...the post-pandemic phase will necessitate a need to mobilise resources for fiscal sustainability, whilst supporting economic growth and addressing enduring challenges around inequality and productivity.”

Figure 1: Composition of government revenue across countries in Africa and Asia, 2018⁵



Below are examples of sectors that have experienced a significant downturn in activity and face an uncertain recovery over the medium term. In many developing countries, these sectors play a major role in revenue generation

- **Tourism⁶:** The industry is unlikely to return to pre-pandemic levels in the short term. There are large implications for employment and income, as well as on intermediate sectoral linkages, including construction, trade, air transport, and agriculture. Tourism accounts for between 2-5% of GDP and 5-30% of exports in Ethiopia, Kenya, Rwanda, Sierra Leone, Uganda, and Zambia.⁷ This sector also contributes heavily to value-added tax (VAT) and corporate income tax.
- **International trade⁸:** There has been a large decline in cross-border trade, which may cause permanent shifts in trend-rate growth. There is also significant uncertainty in the amount of revenue expected from tariffs and customs, due to global discussions on re-/near-shoring of value chains on one hand and trade liberalisation on the other (the latter exemplified by the implementation of the African Continental Free Trade Area, AfCFTA). International trade flows contribute to trade tax revenues collected by customs authorities.

5. UNU-WIDER (2020). Government Revenue Dataset

6. UNCTAD (2020). "COVID-19 and Tourism: Addressing the economic consequences"

7. IMF (2020). "COVID-19: An Unprecedented Threat to Development April 2020." Regional Economic Outlook, Sub-Saharan Africa

8. WTO (2020). "Trade set to plunge as COVID-19 pandemic upends global economy."

- **Natural resources⁹:** Oil and commodity prices have generally recovered some losses from their lowest point in the second quarter of 2020. However, future growth is uncertain and subject to a recovery in the global economy. Commodity exporting nations need to be cautious in expecting a quick rebound to pre-pandemic levels.
- **Export-intensive sectors:** Depressed global demand for goods and services exports will lead to reduced income for export-intensive sectors. Not only will trade taxes (on exports) fall, so too will corporate income taxes.

In sub-Saharan Africa (SSA), the IMF has predicted that government revenues will fall by an average of 2.6 percentage points of GDP in 2020, due to lower personal and corporate incomes.¹⁰ IMF estimates of SSA government revenues in 2019 stand at 17.3 percentage points of GDP, so this equates to a dramatic fall of 15%.¹¹ For reasons discussed above, governments of oil-exporting and tourism-dependent countries are expected to be hit the hardest. In Ghana, fiscal authorities estimate government revenues to be 3.5 percentage points of GDP lower in 2020, largely due to lower petroleum receipts.¹² Rwanda might face revenue losses of 2.8 percentage points of GDP in both 2019/20 and 2020/21 fiscal years.¹³ Due to the large fall in copper prices, Zambia recorded a 30% fall in government revenues in the first fiscal quarter up to April 2020.¹⁴

Subnational effects

The effect on subnational government revenues largely depends on the composition of its revenue streams. A large component of this revenue is intergovernmental transfers, especially for subnational governments in SSA, as highlighted in Figure 2. This is particularly prevalent in cities: for example, Uganda's urban municipalities raise 26% of revenues from their 'own source' and rely on central transfers for the remaining 76%.¹⁵ This dependence is even starker for regional or rural subnational governments in Uganda, which rely on the national government for 96% of their revenues.

Expectedly, these governments will struggle to respond to the pandemic recovery without assistance. Therefore, for functional government service delivery, central governments must understand subnational fiscal requirements and fill these critical gaps accordingly. The impact of the pandemic further underscores the importance of regularity in tax revenue flows.

9. UNCTAD (2019). State of Commodity Dependence

10. IMF (2020). Regional Economic Outlook for Sub-Saharan Africa, June 2020 Update.

11. IMF (2020). World Economic Outlook Database.

12. Ministry of Finance and Economic Planning, Ghana (2020), Mid-Year Fiscal Policy Review.

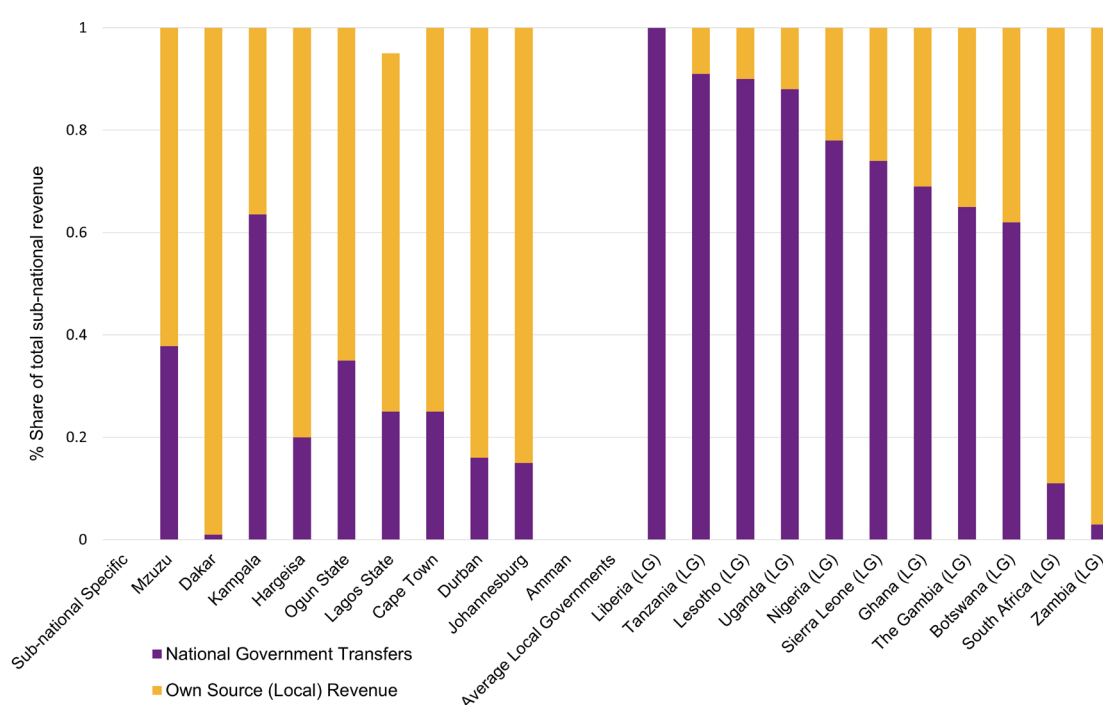
13. Republic of Rwanda (2020), Economic Recovery Plan May 2020 - December 2021.

14. Reuters (2020). "Zambia mining revenues drop 30% due to COVID-19, Chamber of Mines says."

15. UNCDF (2020). Impact of COVID-19 on Local Government Fiscal Space and Service Delivery in Uganda.

The second most important component in subnational revenue collection is the resilience or diversity of its Own Sources of Revenue (OSR). Typically, these channels are under-developed, which leads to challenges, both because of increased taxation of the pre-existing bases, including over-reliance on daily collections requiring human interaction, as well as because of a potential shift of the tax base into the informal sector. Of the OSR available, estimations from Uganda predict that property tax and user fees will be the hardest hit sources, reducing 47% in both cases. This is because constrained livelihoods will drive lower compliance in property tax submissions, while reduced public service use in cities due to restricted movement will lead to reductions in the payment of user fees. Limited digitisation of revenue collection processes at the sub-national level has also led to decrease in collections; In Accra, revenues fell to zero during the lockdown because of the state's inability to collect taxes in person;¹⁶ this struggle continued after the lockdown was lifted. In Kisumu, Kenya, social distancing protocols led to unstructured daily revenue collection of Bus Park Fees and Market Fees – 15% of OSR – dropping from ~\$150,000 per month to zero.¹⁷

Figure 2: Composition of sub-national revenue in LMICs^{18, 19}



Other estimated impacts on subnational revenues come from reductions in local hotel taxes and traffic fines. For instance, hotel taxes are expected to

16. Personal Communication. Mayor Sowah, Accra. Cities that Work Council Call (10th June 2020).

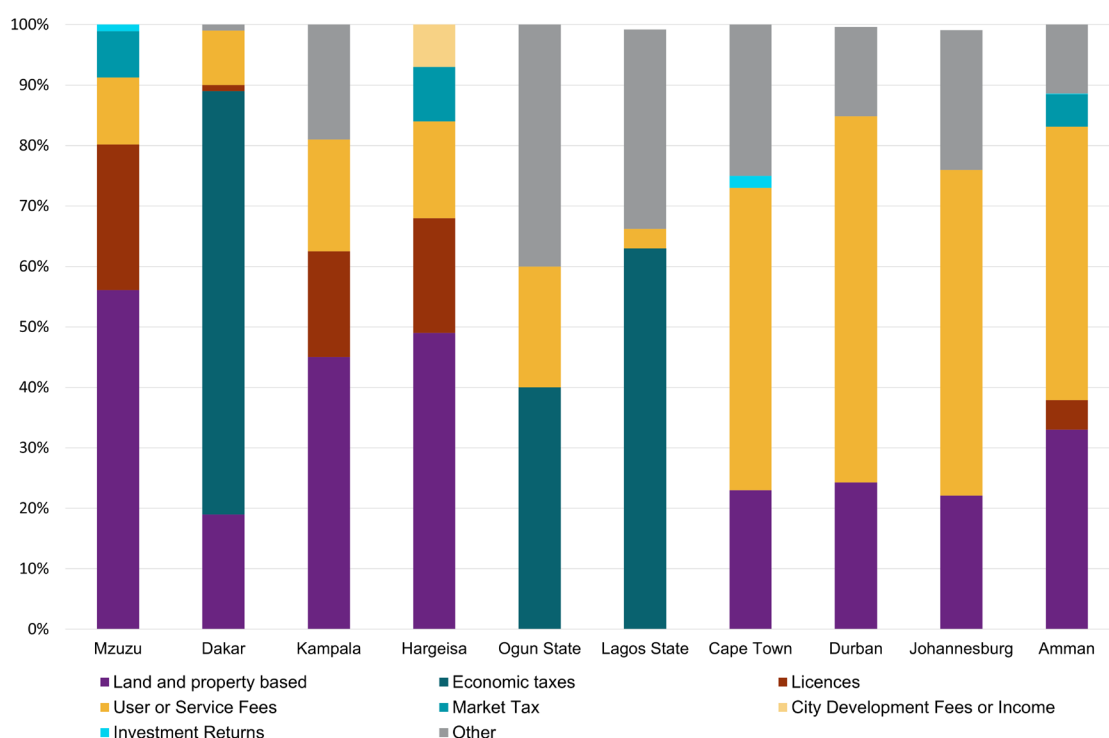
17. Fleck, L. (Forthcoming). "Enhancing the financial position of cities: Lessons from Kisumu Country Government."

18. Data from various IGC sources including IGC Country Programmes and European Commission's "Enhancing the financial position of cities programme"

19. Dakar exemplifies an often seen case in more centralised, often West African countries, where it collects revenue at a local level but transfers the entirety to the central government before receiving an often arbitrary sum in return as a form of transfer.

drop by 35% in Uganda. Addis Ababa, which saw partial or full closures of almost 90% of its hotels in June, is facing a \$35m loss in this revenue stream.²⁰ Similarly, traffic fines, which at 17% are the second largest OSR stream in the Greater Amman Municipality (behind Property, Land & Building Tax at 32%) will also be impacted heavily under containment.²¹

Figure 3: Breakdown of Own Source Revenue across city size and geography^{22, 23}



There is currently limited cross-country data to ascertain the initial impact of these losses, particularly at the local scale, leading to variations in estimations of subnational revenue reductions. At the lower bound, the fiscal loss of urban governments in Uganda is estimated to range from 5-10%.²⁴ However, some estimates go up to 50%²⁵, depending on the revenue composition – for example, the level of own source and informal revenues. The highest estimates go up to 60-70%²⁶ across Africa if the continent suffers under a prolonged pandemic.

20. Edlam Yemeru UN Economic Commission for Africa Chief of Urbanisation in 16th June 2020 United Nations 'Cities and COVID-19' webinar.

21. Financial and Institutional Analysis and Technical Assistance Plan for Greater Amman Municipality (2017).

22. The majority of Dakar's OSR is CEL – a local government economic contribution from firms that depends on the value of the premises, number of employees, turnover, machinery employed, installed energy capacity, and other size proxies. Moreover, within this formula, rental value of premises is by far the largest factor, so the tax starts to resemble a property tax.

23. Due to Electricity and Water Service Fees being part of South Africa's Local government mandate, service fees make up large parts of the Own Source Revenue.

24. UNCDF (2020). "Impact of COVID-19 on Local Government Fiscal Space and Service Delivery in Uganda."

25. Jean Pierre Elong Mbassi, Secretary General of UCLG-Africa in 16th June 2020 United Nations 'Cities and COVID-19' webinar.

26. UNECA (2020). "Impacts and Perspectives of COVID-19 Responses in African Cities."

Continued containment efforts will further dramatically constrain livelihoods, people's ability to pay, as well as tax collectors' ability to conduct face-to-face collections. Some of these estimations are being incorporated into policy. For example, The Rwandan city Kigali announced a 19% decrease in its city budget from RWF124B (US\$131M) to RWF100B (US\$106M).²⁷ This is both 'due to the effects of the novel coronavirus' but also the cessation of a Chinese Exim Bank loan facilitated by the central government for road upgrades.²⁸

Each city's revenue context is unique and estimations in uncertain times lead to uncertain estimations. Therefore, understanding the drivers of budget contractions at the subnational level is important. These drivers of budget contractions are its national transfer reliance and own source resilience. However their subnational revenue sources are split, it is likely that most cities in developing countries are facing a fiscal crunch.

Instruments for reform

1. Wealth tax

Wealth taxes are underutilised as a policy tool but in response to COVID-19, they can be efficient and engaging, while winning public support and paving the way for an equitable recovery.²⁹

Wealth taxes can be a way to reduce inequality while raising revenue for public service delivery. Where polls are available, in the UK and US, public approval for wealth taxation is over 60%, particularly if one-off or time-bound in nature.³⁰ With the situation-specific, one-off nature of COVID-19, a temporary wealth tax could generate smaller distortions in savings and investments in the long term. According to estimates, in South Africa, a progressive, time-limited wealth tax on the wealthiest 1% of the population with an expected 30% evasion rate³¹ would raise US\$8.4B — equivalent to 29% of the country's COVID-19 economic support package.³²

There is a historical precedent for the success of wealth taxes in financing recovery efforts. After WW II, Germany put in place highly progressive, time-limited wealth taxes that paved the way for the German post-war economic "miracle".³³

"Wealth taxes can be a way to reduce inequality while raising revenue for public service delivery."

27. Iliza, A. (2020). "City of Kigali budget falls by 19 percent amid Covid-19".

28. Media, D. (2016) "Rwf58 Billion Earmarked for Kigali Urban Road Upgrades." *Construction Insight Magazine*.

29. Winter, E. (2020). Voters in Key States Support a Wealth Tax. Data for Progress

30. Times, T. F. (2020). Majority of UK public supports windfall taxes. The Financial Times

31. Saez, E., & Zucman, G. (2019). Progressive wealth taxation. *Brookings Papers on Economic Activity*.

32. Africa, M. o. F. R. o. S. (2020). "Remarks by Minister of Finance, Mr Tito Mboweni, during the media briefing to outline R500bn economic support package".

33. Landais, C., Saez, E., & Zucman, G. (2020). A progressive European wealth tax to fund the European COVID response. VoxEU.

The UK, in contrast, took 100 years to pay their WW I debt.³⁴ With 0.7% of the world's population holding 45% of its wealth, wealth taxation can be a useful policy response to finance public service delivery.

Key considerations

Targeting wealth

Wealth taxes could be designed based on three principles that are relevant in the context of COVID-19: easy to find, easy to value, and easy to liquidate. Targeting the more visible cash and non-financial assets that can also be easily valued and liquidated can be efficient from a revenue point of view, even if it even if leads to distortions. This approach is an example of a “third-best” tax policy, thus named because it is more applicable for low-income countries to address tax administration with their limited information and enforcement levels than their high-income counterparts.³⁵ Table 1 outlines wealth type split by these criteria.

Table 1: Distribution of wealth type

Wealth type	Global HWI ³⁶	South Africa HWI ³⁷	Easy to find	Easy to value	Easy to liquidate
Equities	27%	21%	Easily hidden offshore in tax havens	Higher capacity wealth management can skew valuations	As long as there is a market, it is easy to sell in part or whole
Cash	25%	12%	Global capital mobility is high	Very easy to value	Very easy to liquidate
Real Estate³⁸	18%	32%	Very visible and hard to move	Available frameworks for valuation	Difficult to sell real estate in parts and trickier to match buyers with sellers
Fixed Income investments	17%	36%	Easily hidden offshore in tax havens	Higher capacity wealth management can skew valuations	National and global markets present for such investment
Alternative Investments	13%		Easily hidden offshore in tax havens	Higher capacity wealth management can skew valuations	Alternative nature may make matching buyers and sellers more difficult

34. BBC (2014) Government to pay off WW1 debt.

35. Kleven, H., A. Khan and U. Kaul (2016). “Taxing to develop: When ‘third-best’ is best.” International Growth Centre (IGC).

36. Mc Laughlin, M. L., & Buchanan, J. (2017). *Revenue Administration: Implementing a High-Wealth Individual Compliance Program*. International Monetary Fund

37. Orthofer, A. (2015). Private wealth in a developing country: A South African perspective on Piketty. ERSA [Economic Research Southern Africa] Working Paper, (564).

38. Includes 6% of non-financial assets.

39. Blake, M., E. Glaeser, A. Haas, S. Kriticos and N. Mutizwa-Mangiza (2020) “Water, sanitation, and hygiene policy in the time of COVID-19.” International Growth Centre Policy Brief.

40. Winter, E. (2020). Voters in Key States Support a Wealth Tax. Data for Progress

There is limited evidence on wealth tax enforcement from low- and middle-income countries (LMICs). However, available information points to two key aspects.

- **Carrots:** Building voluntary compliance by ring-fencing taxes. Ring-fencing taxes can be a positive way to reinforce payment. The COVID-19 pandemic has highlighted the challenges of weak health systems. If countries want to deliver infrastructure as part of the COVID-19 recovery, then evidence from the US shows that among the numerous tax policies available, a wealth tax is most supported to deliver this.
- **Sticks:** Punishing non-compliance through criminalisation. Criminalisation through harsher sentences and prison sanctions the act of concealing assets has been found to be correlated with an increase of wealth disclosure and taxation in Colombia.⁴¹

Time horizon of taxation

The COVID-19 pandemic is a unique shock; it is time-bound and has impacts on income, wealth, and health. A proportionate tax policy response, thus, should mimic this. Some economists are in favour of redistributing today's wealth and reversing trends of increasing private wealth, rather than burdening future generations with a higher tax burden.⁴² This point is further highlighted by recent findings that show that in developed countries, the wealth of the top 1% has significantly grown during the COVID-19 crisis. Wealth taxes can be popular, and in highly unequal countries such as the US, also potentially broadly supported by the public.⁴³

Tangibility and administrative difficulties

Two primary difficulties inhibit wealth taxation: administration and elites. Administration is hampered if wealth taxes attempt to capture all areas of wealth, as this can drive up the costs of implementation – a fact behind both India's⁴⁴ and UK's⁴⁵ difficulties in wealth tax delivery. With an entire offshore wealth management industry catering to the global elite of high-wealth individuals (HWI),⁴⁶ tax offices in emerging countries, often with limited resources, struggle with the complex task of taxing certain types of wealth.

41. Londoño-Velez, J., & Ávila-Mahecha, J. (2018, August). Can wealth taxation work in developing countries? Quasi-experimental evidence from Colombia. In *Annual Congress of the IIPF*.

42. Novokmet, F., Piketty, T., Yang, L., & Zucman, G. (2018, May). From communism to capitalism: private versus public property and inequality in China and Russia. In *AEA Papers and Proceedings* (Vol. 108, pp. 109-13).

43. Winter, E. (2020). "Voters in Key States Support a Wealth Tax." Data for Progress

44. Express, F. (2015). "Budget 2015: Wealth tax abolished; extra 2% surcharge on super rich." Financial Express.

45. Glennerster, H. (2012). Why was a wealth tax for the UK abandoned?: lessons for the policy process and tackling wealth inequality. *Journal of social policy*, 41(2), 233-249.

46. Harrington, B. (2016). *Capital without borders: Wealth managers and the one percent*. Harvard University Press.

Furthermore, it is often HWI, regularly economic or political elites, who directly or indirectly influence policy in this area.⁴⁷ By some credible estimates, over 30% of African financial wealth is held offshore⁴⁸ – higher than 22% in Latin America.⁴⁹ While a proactive step in the right direction, wealth taxation is not a fiscal solution that can fill all public finance gaps.

2. Property tax

Taxes on land and property are underutilised in most developing countries. Land and property taxes account for 0.5% of GDP across sub-Saharan African countries, compared to around 2% in OECD countries.⁵⁰ Most properties in developing countries are undervalued, functionally un-taxed, or outright exempted from taxation. The COVID-19 pandemic can offer an opportunity to consider reforming this revenue base.⁵¹

Recurrent taxes on immovable land and property can be a relatively stable source of revenue, when compared to income or corporate taxes, even (and especially) during economic shocks.⁵² Evidence from past shocks suggests that housing prices generally recover fast. A study of outbreaks of the plague in 17th-century Amsterdam and cholera in 19th-century Paris shows that housing prices declined, but recovered quickly afterwards.⁵³ More recently, during the 2007-8 Global Crisis, which saw a significant housing market contraction, house prices declined significantly in the United States but recovered within a few years. Even during this period of decline, revenue from property taxation actually increased before decreasing and then rebounding quickly. This is credited to the lag between market and assessed value of houses (with the latter typically being undervalued), and policymakers increasing tax rates to maintain revenue.⁵⁴ It is unclear if the same trend holds in developing countries where properties are not valued regularly and liquidity constraints may be more severe, but this source of revenue holds the promise of more stability, compared to other tax bases.

47. Kangave, J., Nakato, S., Waiswa, R., Nalukwago Isingoma, M. and Lumala Zzimbe, P. (2020). Taxing High Net Worth Individuals: A Case Study of the Uganda Revenue Authority's Approach. ICTD Working Papers 45 and 72.

48. Zucman, G. (2014). Taxing across borders: Tracking personal wealth and corporate profits. *Journal of economic perspectives*, 28(4), 121-48.

49. Zucman, G. (2015). *The hidden wealth of nations: The scourge of tax havens*. University of Chicago Press.

50. Franzsen, R., & McCluskey, W. (2017). Property tax in Africa. Cambridge, MA: *Lincoln Institute of Land Policy*.

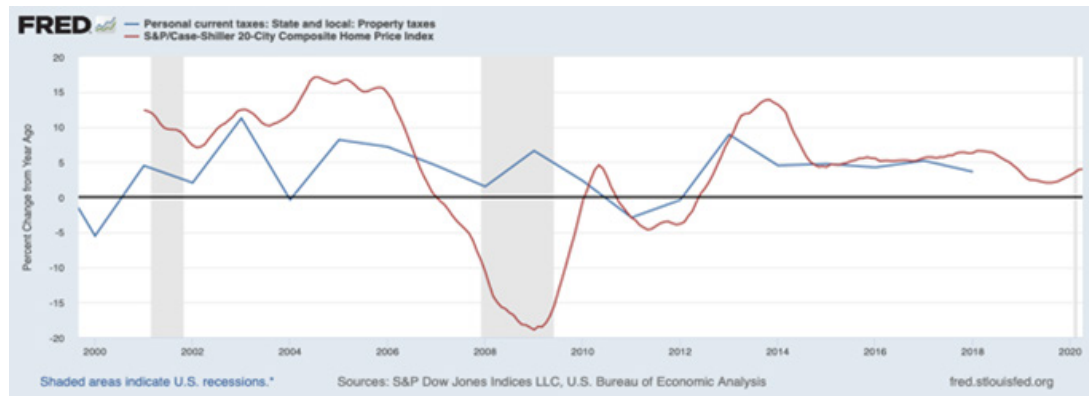
51. Wani, S., Shaikh, H., and Harman, O (2020). "Urban Property Taxes in Pakistan's Punjab." International Growth Centre (IGC).

52. Norregaard, M. J. (2013). *Taxing immovable property revenue potential and implementation challenges* (No. 13-129). International Monetary Fund.

53. Ling, D. C., Wang, C., & Zhou, T. (2020). A First Look at the Impact of COVID19 on Commercial Real Estate Prices: Asset Level Evidence. Available at SSRN 3593101.

54. Lutz, B., Molloy, R., & Shan, H. (2011). The housing crisis and state and local government tax revenue: Five channels. *Regional Science and Urban Economics*, 41(4), 306-319.

Figure 5: Home prices recovered within two years in the US after the 2008 Global Crisis, while property taxation remained relatively stable⁵⁵



Key considerations

There are three important policy decisions to consider in relation to property taxation in the context of the COVID-19 pandemic.

Addressing liquidity constraint of taxpayers

The COVID-19 pandemic is likely to cause liquidity constraints for property owners, making it harder for them to pay for new enforcement or expanded liability. Policymakers should thus design tax policy that takes these liquidity constraints into account. The straightest way to this is to establish tax deferral schemes that allow property owners to push a portion of their liability to a future date. Alternatively, policymakers can provide time-bound exemptions for some households, especially those in lower income quintiles as well as those with mortgages, although this would involve sacrificing revenue.⁵⁶ These policies must be time-bound, otherwise reversing exemptions can be politically costly or even impossible.

Conversely, residents not facing liquidity constraints can be encouraged to pay property taxes in advance. This can be done by offering pre-payment discounts: for instance, New York City offers a 0.5% discount on annual property tax if paid by a certain date.⁵⁷ The city of Ahmedabad in India has also offered a 10% rebate to people who pay next year's property taxes in 2020.⁵⁸

55. U.S. Bureau of Economic Analysis, Personal current taxes: State and local: Property taxes [S210401A027NBEA], retrieved from FRED, Federal Reserve Bank of St. Louis on 7 July 2020, and S&P Dow Jones Indices LLC, S&P/Case-Shiller 20-City Composite Home Price Index [SPCS20RSA], retrieved from FRED, Federal Reserve Bank of St. Louis on 7 July 2020.

56. Cloyne, J., Ferreira, C., & Surico, P. (2020). Monetary policy when households have debt: new evidence on the transmission mechanism. *The Review of Economic Studies*, 87(1), 102-129.

57. NYC Department of Finance

58. Times, o. I. (24 May 2020). "Ahmedabad Municipal Corporation to give 10% rebate on advance property tax." *Times of India*.

Such policies can help governments front-load some revenue collection during this fiscally-constrained time. However, it is important to factor such discounts into the impact on revenue in subsequent fiscal years. By doing this, tax officials are essentially trading off more tax revenue today with future tax revenues in the coming fiscal year.

Enforcing collection on the richest

Immediate enforcement can focus on the richest quintile of the population, that has the greatest ability to pay. If tax liability is pushed on the middle or bottom quintiles that are already credit constrained, it may have strongly negative impacts on consumption, as recent evidence from Mexico City suggests.⁵⁹ However, identifying the richest groups can be challenging. In the past, policymakers have used proxies such as luxury car purchases or repeated foreign trips to identify them. In 2014, Ugandan tax collectors started collecting taxes from rental properties by creating a property register of rental property owners, which, by 2015, had over 9,000 properties.⁶⁰ Some cities may have the ability to enforce such collection even using existing tax systems by tweaking incentive structures for tax officials. In Pakistan's Punjab province, a new incentive scheme to encourage tax collectors to raise property tax led to collections increasing by 46% without reforming the underlying system or changing rates.⁶¹

Using technology to substitute face-to-face interaction

Many cities rely on valuing and collecting property taxes in person; this can be tricky to implement, given current social distancing rules. Where technology is available or can be deployed quickly, it can substitute these face-to-face interactions. Technology can be particularly useful in reducing the cost of collection, which can siphon off over half of the revenue in some cities.⁶² A baseline survey in 2017 of municipalities in Ghana found that municipalities using technology to facilitate local tax collection were associated with 83% more revenue per resident than their counterparts without such technologies.⁶³ Technology can minimise or even eliminate face-to-face contact in tax collection by allowing people to pay online if they have bank accounts. Where formal banking channels are rare, mobile payments – a relatively well-established phenomenon in many developing countries – can provide an alternative.

59. Brockmeyer, A., Ramirez, K., and Suárez Serrato, J.C. (Forthcoming). "Optimal Property Taxation in Developing Countries: Theory and Evidence from Mexico."

60. Kangave, J., Nakato, S., Waiswa, R., & Zzimbe, P. (2016). Boosting Revenue collection through taxing high net worth individuals: The case of Uganda.

61. Khan, A. Q., Khwaja, A. I., & Olken, B. A. (2016). Tax farming redux: Experimental evidence on performance pay for tax collectors. *The Quarterly Journal of Economics*, 131(1), 219-271.

62. Dzansi, J., Jensen, A., Lagakos, D., Nyarkpoh, M., Otoo, I., & Telli, H. (Forthcoming). "Using Technology to Increase Tax Capacity: What have we learned thus far?"

63. Dzansi, J., Jensen, A., Lagakos, D., Nyarkpoh, M., Otoo, I., & Telli, H. (Forthcoming). "Using Technology to Increase Tax Capacity: What have we learned thus far?"

3. Consumption tax

The popularity of consumption-based taxes, especially the VAT system, has grown sharply in the past 30 years. In 1990, only 50 countries had a VAT system, but by 2016, that number had increased to 165.⁶⁴ In sub-Saharan Africa, 80% of countries have adopted VAT, which is now responsible for raising around one-quarter of all tax revenue.⁶⁵ VAT remains one of the most popular instruments for revenue raising around the world, in part because it is thought to induce tax compliance across supply chains and be relatively less distortionary than other general sales taxes.

During the 2008 Global Crisis, average consumption tax revenues in OECD countries reached their lowest point since 1992. Nevertheless, year-on-year changes in consumption tax revenues as a share of GDP between 2007 and 2009 were smaller than changes in revenues from taxes on corporate income, payroll and property taxes, indicating that consumption tax revenues remained more stable than taxes on most other bases during the crisis.⁶⁶

Governments across the world introduced different VAT-related measures to offset the effect of the pandemic on their economies. These include a temporary reduction of rates on certain goods and services, accelerated refunds, deferral of payments, extensions of filing deadlines, simplifying procedures for claiming relief from VAT/GST, and postponement of regular tax authority audit and control activities. Jordan introduced a reduction in GST from 16% to 8% for hotels and tourist resorts, while other developing countries like Lebanon and Pakistan extended filing and payment deadlines. Tax authorities in Turkey offered to defer payments in April, May, and June of withholding, VAT withholding and Social Security Institution premiums for taxpayers engaged in a specific field of activities.

Among these measures, it should be noted that tax rate reductions might be less effective if the consumption of households, especially poorer households, was already from among zero-rated or exempted goods, or their purchases came from stores outside the VAT net.⁶⁷ In addition, such measures may be politically difficult to roll back once they have been introduced, even on a temporary basis. There is also evidence that the impact of lower VAT rates on consumption and consumer prices may be short-lived.⁶⁸

64. OECD, 2016. "Consumption Tax Trends 2016: VAT/GST and Excise Rates, Trends and Policy Issues." OECD Publishing.

65. Keen, M. (2016). "Taxation and Development—Again", International Monetary Fund Working Paper, Fiscal Affairs Department.

66. Simon, H. and M. Harding (2020), "What drives consumption tax revenues?: Disentangling policy and macroeconomic drivers", OECD Taxation Working Papers, No. 47, OECD Publishing, Paris.

67. Bachas, P. J., Gadenne, L., & Jensen, A. (2020). Informality, Consumption Taxes and Redistribution. *World Bank Policy Research Working Paper*, (9267).

68. OECD, 2020. "Tax and Fiscal Policy in Response to the Coronavirus Crisis: Strengthening Confidence and Resilience". OECD Publishing.

In addition, and over the long term, exemptions and rate cuts might have sizable implications for revenue mobilisation and production efficiency. Thus, it may be best to address different policy goals through different policy instruments.⁶⁹

Given that consumption taxes are so quantitatively important in developing countries, tax authorities should work on strengthening and broadening the tax base so that it can be a more resilient source of revenues during future downturns. Growing microeconomic evidence on the functioning of VAT systems in developing countries creates an opportunity to learn how to leverage the full potential of consumption taxes.

Key considerations

Technology can increase compliance

Economic downturns such as the current pandemic can create undesired effects on compliance, which can put further downward pressure on VAT revenues.⁷⁰ However, rapid innovation in Information Communication Technologies (ICT) can provide tax authorities with new enforcement tools to improve the functioning of VAT systems and increase compliance.⁷¹

In Rwanda, evidence from a study suggests that introducing electronic billing machines increase the effectiveness of tax administration by increasing VAT receipts by 5.4% on average.⁷² In Peru, a similar experiment found that e-invoicing increased reported firm sales, purchases and value-added by over 5% in the first year after adoption.⁷³ Furthermore, the information gathered across the supply chain can reinforce compliance among other tax instruments. When tax evasion is high and administration is weak, information generated by the VAT chain can be used to improve tax administration and increase revenues obtained from other taxes such as corporate income tax.⁷⁴

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"Growing microeconomic evidence on the functioning of VAT systems in developing countries creates an opportunity to learn how to leverage the full potential of consumption taxes."

Strategic formalisation can spread

Widespread informality in developing countries is detrimental to the tax base. However, evidence shows that a positive compliance shock in the VAT system can create a domino effect of formalisation. Evidence also finds that improving VAT compliance for sales to final consumers in Colombia leads to important spill-over effects for the whole supply chain.⁷⁵ Similarly, compliance shocks had a multiplier effect across supply chains in West Bengal, India.⁷⁶ Because complying firms prefer trading and dealing with other firms of the same type, formalisation can potentially spread through the production network.

Over the long term, the process of formalisation can have strong positive implications for productivity and economic growth.⁷⁷ In addition, it can help generate firm-level data that can be used for better targeting of industrial policy to support firms in future downturns.

Revisiting exemptions

VAT rules advocate a properly designed, broad-based instrument that applies a uniform rate, with minimal exemptions, and no domestic zero ratings.⁷⁸ Nonetheless, almost all tax regimes have some exemptions and reduce rates for certain essential goods and services – mostly with equity considerations in mind. Applying reduced VAT rates to goods such as food that form a larger fraction of the total spending of poorer households is meant to make VAT more progressive than it would be if charged at a uniform rate on all goods and services.

However, recent evidence suggests that the redistributive potential of such exemptions and reduction in rates is limited.⁷⁹ Rather, more effort, along the lines described above, could be invested in building the correct enforcement capacity required to levy progressive taxes such as a wealth tax. The COVID-19 pandemic has also cast a spotlight on the need to build better social safety nets for poorer citizens. Rather than attempt to redistribute indirectly through VAT exemptions, it may be more worthwhile for governments to focus on building capacity for direct transfers and taxes.

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4. Corporation tax

Corporate taxation is an important source of revenue for developing countries. On average, it accounts for 15.3% of tax revenue (~2.8% of GDP) in Africa – significantly higher than the rate of 9% in OECD countries.⁸⁰ Corporate taxes are typically levied on company profits at a statutory rate, which have globally declined between 2000 and 2020. In many instances, depending on jurisdiction-specific factors, corporate tax revenues and firms' tax liabilities might be lower than statutory rate requirements. Taken together, these equate to the effective tax rate, which can include

- **Multiple tax rates:** preferential regimes for certain corporations, different tax rates for different industries, progressive rates based on size, residency status of the corporation, and special economic zones;
- **Breadth of tax base:** influenced by the level of tax expenditures, including allowances, deductions and fiscal depreciation rules built into the tax system;
- **Incorporation:** the extent to which firms are incorporated, or the degree of informality;
- **Cyclicalities:** relationship with the economic cycle, such as with loss-offsetting provisions;
- **Other taxes:** reliance elsewhere such as personal income and consumption.

In Africa, between 1996 and 2007, there was a substantial decline in the effective tax rate due to a combination of both lower statutory rates and a narrowing of the tax base. This decline was due to policies such as depreciation allowances offering generous incentives.⁸¹ Evidence suggests that revenues are less responsive to changes in the statutory rate in Africa than elsewhere.⁸² This could partly be due to the prevalence of special tax regimes that render the statutory rate less effective, as tax-sensitive investments are more likely to take place due to the special regime, making the standard tax rate irrelevant.

Key considerations

Raising additional revenue from corporate taxation must be balanced with the need to support economic recovery and the struggling private sector. These considerations should underlie a fair and efficient approach towards meeting policy goals.

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Rationalise tax expenditures

Tax expenditures, such as allowances, deductions, or preferential rates for certain corporations or industries, are expensive. These expenditures sacrifice precious revenue even though it is unclear if they encourage productive investment. The COVID-19 pandemic has created an urgent need to raise additional revenue while simultaneously mitigating the economic hardships it has triggered. To this end, removing inefficient tax expenditures, often benefitting higher-income groups, can be very cost-effective. In Guinea alone, these exemptions cost more than 10% of revenue or 1.25% of the GDP.⁸³ In developing countries, incentives often lack transparency and benefit groups that are better off, worsening inequality in income distribution. These incentives tend to result in net revenue losses through a narrowing of the tax base, and can be significantly less effective in incentivising investment than expected. An analysis conducted across 72 developing countries and 37 high-income countries found a strong negative relationship between corporate tax incentives and corporate tax revenues between 2009 and 2015.⁸⁴

The current pandemic offers an opportunity to systematically review current tax expenditures. In addition, tying the promise of future tax expenditures to current COVID-19 relief efforts could help support newly-vulnerable firms as well as wind down incentives utilised solely by profitable and wealthy firms, thus creating more equity and efficiency. A positive side effect of such rationalisation could be reflected in improved tax compliance, as citizens see the removal of unequal tax expenditures as creating more equity and trust in the tax system.

While the potential of corporate taxation to support investment and firms shouldn't be ignored, it should be carefully considered and well-targeted. This can be done, for example, through the following tools.⁸⁵

- **Multiple tax rates:** preferential regimes for certain corporations, different tax rates for different industries, progressive rates based on size, residency status of the corporation, and special economic zones;
- **Breadth of tax base:** influenced by the level of tax expenditures, including allowances, deductions and fiscal depreciation rules built into the tax system;

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"...the promise of future tax expenditures to current COVID-19 relief efforts could help support newly-vulnerable firms as well as wind down incentives utilised solely by profitable and wealthy firms, thus creating more equity and efficiency."

Raising revenue in solidarity

The COVID-19 pandemic has had a devastating effect on many segments of the economy and has necessitated a substantial fiscal response. Some industries, such as large multinational supermarkets and pharmaceuticals, may have actually experienced higher profits during the pandemic, compared to industries such as tourism or aviation. In these cases, policymakers could consider asking successful firms to contribute to a solidarity tax, which should be earmarked towards financing the COVID-19 response. Identifying such firms – likely large and incorporated – should not be difficult as tax receipts in developing countries are often dominated by only a few large taxpayers.

This could also be an opportunity to further increase the size of the tax base by encouraging the incorporation of informal firms. In developing countries, large informal sectors narrow the tax base. Policies to encourage the formalisation of firms that can support the COVID-19 response and mitigate the economic downturn could include linking COVID-19 social benefits or loans to small firms to incomes reported to the tax authority or, at the very least, the creation of taxpayer registration IDs.⁸⁶

Rethinking corporate taxation

The COVID-19 pandemic may already be changing corporate taxation. Since its onset, Senegal⁸⁷ and Zambia⁸⁸ have ended their double taxation treaties with Mauritius, a tax haven in Africa, citing large revenue losses. With depressed economies, many policymakers may look to lowering the statutory rate as a policy lever to encourage foreign and domestic investment. However, evidence suggests that in many environments, this is not a strong tool to achieve such objectives. Foreign investment seems to be more strongly attracted by pre-existing, country-specific investment climate and regulations, and market opportunities.⁸⁹ As the tax is applied to profits, loss-making firms would not benefit from a lower rate, and governments have no control over how profit-making firms utilise higher profits in the economy, making it risky for budget-constrained governments.

Corporate taxation is generally levied on profits, which is considered more efficient than taxes on turnover. However, this efficiency may depend on the capacity of tax administrations and the extent to which companies are part of transnational groups. These can determine how easily firms can artificially lower locally declared profits and how effectively administrations are able to tax corporations.⁹⁰

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5. Conclusion

The COVID-19 pandemic has strained revenues and expenditures of national and subnational governments. It is likely that the decrease in revenue potential from conventional tax instruments, particularly personal income tax and trade-based taxes, will linger. Tax policies during the post-pandemic recovery period will thus require governments to be resourceful. Effectively targeted tax policy can also help address long-term challenges, such as wealth inequality, which is comparatively high in many developing countries.⁹¹

This brief provides insight on some potential areas for policy reform: taxation of wealth, property, consumption, and corporate income. Some of these instruments may already be in use; however, to better harness their revenue potential in light of the current pandemic, key relevant policy considerations are outlined. Some of these instruments are underutilised in many low-middle income contexts, and this brief highlights their potential benefits in raising public revenue. In addition to direct revenue benefits, most of these reforms – increasing the use of technology, rationalising rates and exemptions, and raising “solidarity” funds – might also have positive spill-over effects in enhancing tax compliance and public morale. This can pave the way for more long-term reforms in the area of tax policy and tax administration.

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